VOL. 8. ROCHESTER, N. Y.—JULY, 1847. No. 7.

THE GENESEE FARMER:

Issued the first of each month, in Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

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P. BARRY, Conductor of the Horticultural Department.

Fifty Cents a Year:

FIVE copies for $2—EIGHT copies for $3. Subscription money, by a regulation of the Post-Master General, may be remitted by Post-Masters free of expense. ☞ All subscriptions to commence with the first number of the volume.

PUBLICATION OFFICE in Talman's Block, Buffalo street, opposite Reynold's Arcade—where all subscriptions not forwarded by mail should be paid.

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To Correspondents.

COMMUNICATIONS have been received during the past month from S. W., A. H. Powers, S. Faulkner, Conrad Miller, ", William Garbutt, A. Zoller, Old Farmer Tim, Leander Wetherell, Durius, A Subscriber, M. M. Rogers, Tertullus Crosby, F. W. L., and Mechanic.

Want of space compels us to defer a number of communications placed in type for this number. Also, notices of several agricultural books, &c., recently received from authors and publishers.

Enlargement of the Farmer.

NEXT month the Farmer will be enlarged to *thirty-two pages*—making eight pages more, in each number, than at present. This is rendered necessary in order to accomodate our advertising friends, without infringing upon that portion of the paper devoted to reading matter. We already give more reading, in proportion to the price, than any other agricultural paper in the Union—and shall hereafter give a still larger amount in each number. The terms of the Farmer will remain unchanged, for the current volume at least. We can yet supply new subscribers with numbers from the commencement of the volume.—Our sets of back numbers are, however, fast diminishing, and those who wish the Farmer will do well to send in their orders as early as convenient.

☞ The enlarged Farmer will be printed on *one sheet*, and subject to *newspaper postage only*.

EDITORS who receive the Farmer will oblige us by copying or noticing the above announcement.

Hints for July.

THE duties of this month are mostly devoted to Haying and Harvesting, which are important items in the farmer's avocations.

The late heavy rains and cool weather will improve the grass, and probably retard its period of ripening. Clover should be cut when in full blossom, as should June grass and meadows; it is a respectable stock hay, if cut green, but if left till ripe is little better than straw. Timothy will bear a riper stage than any other grass. As a general rule all medicinal and culinary herbs should be gathered while in blossom, and before ripening their seed, as they then contain more of the essential oils and saccharine matter than at any other time: the same reasoning applies to hay and clover.

Clover and Timothy should be cut about the first blossoming of the timothy, if the clover is of the medium kind—if of the large kind, they come into season at the same period, and should only be sown together. Fields that are three-fourths clover should only be cured by sweating in cocks. After laying in the sun till fairly wilted, make up into cocks of 75 or 100 lbs., where they may lie 3 or 4 days; then open to a few hours sun, and it is ready for the barn. A little salt, say 4 quarts to the ton, is beneficial—more than that is sometimes injurious to cattle.

The *horse rake*, on old fields, is a great saving in expedition and expenditure. No farmer with ten acres of hay should be without one. Swift's Patent, of Clarkson, in this county, is the one we prefer, containing an important principle that no other one does within our cognizance.

Wheat harvest will be late this season, and therefore exposed to rust and shrinkage. The heads of wheat will be short, in this region; the cold and drouth, at the period the embryo formed, has had the effect to defeat a full development—although it has increased in offsetts, but not enough to compensate for the shortened heads.

Cut all the grains before fully ripe. You will have more pounds of berry and finer flour, and

save the distribution of chess and cockle over the field.

The English method of *shocking* is the safest and best. Commence by leaning two sheaves against each other, and then continue on both sides till there are a dozen; flatten and beat the heads together till they interweave and form the shape of a flat broom. They will not blow down, dry quick, and will withstand a long series of wet weather.

Try to get along without the use of spirits during the harvest labors. Substitute some home-brewed beer, or coffee, or cold water, ginger and molasses. Water a little soured with vinegar, and sweetened, is a great reliever of thirst.

The greater part of the *spring seeding* with clover and timothy will be lost, from the want of rain: the only remedy is to seed again early next spring, and that process none of the most sure.

Turn your sheep on to the summer fallows as soon as they look green—after which thoroughly drag or work over with a cultivator.

This month and August are thought unfavorable to making and laying down butter, and therefore many resort to cheese making, which no one should do with less than from 8 to 12 cows, as small cheese are rarely good; they dry and cure before a sufficient time has elapsed to go through the second or incipient putrid fomentation, whereby that peculiar, pungent and essential flavor and mellowness is imparted to them. Butter well worked over a second time, and laid down in brine, will keep sweet any length of time.—We have eaten butter 4 years old, as sweet as the day it was made. It whitens a little on the outside, which may be scraped off if intended for market.

Keep the weeds out of your garden, and pick up and burn all the fallen fruit to kill the future insect that destroys your plums, &c. Look every day at your potato tops, and see if you can detect the cause of the disease.

Analysis of Soils.

EVERY month's experience brings to our notice some new facts, illustrative of the great practical value of chemical researches into the properties, and capabilities of different soils. A few weeks since, Mr. P. RISDORPH, of West Bloomfield left at our office samples of the surface and sub-soil of a farm belonging to him in Oswego county, about 30 miles north of Rome. These specimens are so unlike all soils in this part of the State, that they may be studied by our readers with profit, who would be well informed on the subject of improving poor lands.

The surface earth had 3 per cent. of moisture, and 6 of organic, combustible matter in it.—These removed, 100 grains of the mineral elements gave 97 of fine silicious sand, which was insoluble in boiling hydrochloric acid. The other 3 grains were alumina and iron, with bare traces of lime and magnesia. 3000 grains of this surface soil as it came from the field, were steeped in pure rain water as it comes from the clouds, warmed to about blood heat, for a week. The liquid was highly colored and *sour*, or had an acid re-action. It was carefully filtered (a slow process,) and evaporated to dryness. Its residuum weighed 5.60 grains. Of this dry matter 3.20 grains were humus, humic acid, or some other combustible substance; and 2.40 grains were incombustible minerals. In the latter there were 1.24 grains of alumina and iron with traces of sulphuric and phosphoric acids. Of lime there was 0.85 grains; soluble silica 0.16 grains, beside traces of magnesia and potash. All these alkaline and other minerals doubtless came from the 180 grains of vegetable mold which the 3000 grains of surface soil contained.

We had only promised to examine the surface soil of Mr. R., charging him but $2 for a week's professional labor. But our curiosity was deeply excited to find out the source of the lime and potash in the liquid with which we had washed the surface soil. Instead of fusing the 97 per cent of silica to search for lime, potash, and soda, locked up in the shape of insoluble silicates, (where doubtless they could be found,) we thought that lime must exist somewhere in the sub-soil in a more available form. Accordingly we searched there for it. 100 grains of sub-soil gave

Water of absorption,	2.37
Organic matter,	2.55
Silica,	89.00
Alumina and oxide of Iron,	5.44
Lime,	.50
Magnesia and Potash,	traces.
Loss,	.14
	100.00

1000 grains of this earth gave us 5 grains of lime, 1 grain of magnesia, also half a grain of potash and soda.

The reader has now a right to ask "What important practical truths do the above facts disclose?"

We answer: First, that the surface soil is *sour*, contains an excess of sand (silicic acid,) and lacks lime, alumina, potash, and soda.

Secondly, That the application of leached ashes and stiff clay will improve the texture of the soil mechanically, as well as chemically—rendering it less liable to leach, and lose any manure or other fertilizers that may be applied to it.

Thirdly, That *deep plowing*, by bringing up the lime and alumina from the sub-soil, will, with the use of a heavy roller, improve the land.

Fourthly, That unleached ashes will be of peculiar value to correct the acidity of the soil, and increase the solubility of the sand. For the fact must not be over-looked that 3000 grains of this sandy soil gave to rain water, as it falls from the heavens, but one-sixth of a grain of soluble silica. How to dissolve silica, or a flint tumbler,

so as to supply this important element in corn stalks, and the stems of timothy, oats, and wheat, is what the reader should learn in this lesson, if he does not already understand how nature operates in this matter. The presence of the alkalies, potash, or soda, is indispensable in the soil, to aid in dissolving fine particles of silicious sand.

Fifthly, The analyses we have made show, that crops which have long roots, reaching to the sub-soil, like clover, corn, beans, parsneps, and carrots, and extracting therefrom lime and other alkaline minerals, are better adapted to this open soil than short rooted plants, which draw their nourishment from the surface soil exclusively. These crops should be fed to sheep, cows, and other domestic animals on the fields, that their treading upon the land may make it more compact, whilst their droppings will add fertilizing elements drawn alike from the sub-soil and the atmosphere.

The application of 10 bushels of unleached ashes, 6 of lime, 3 of salt, 1 of gypsum, and 1 of burnt bones, well pulverized, to an acre of this land, will greatly increase its productiveness.—It will be much better for sheep to eat clover, or any other crop, on the land, and leave the manure thereon, than to plow in green plants of any kind to ferment and *sour* without the correction of alkalies.

Clover, peas, beans, carrots, turneps, potatoes, oats, and corn, are the crops on which we should mainly rely on this farm, provided the specimens sent us are fair samples of the soil on its general surface.

If any of our readers wish to have their soils analyzed at a mere nominal price, they had better not let present opportunity pass. The writer has a call from a distant State for his professional services, which he thinks of answering. It is a curious fact that he receives twenty dollars for writing political articles for the perusal of farmers, where he gets one for investigating the composition of their soils at no inconsiderable expense for apparatus and chemicals. We do not complain of this, for it is much pleasanter to sit by a table and write, than to toil over the poisonous fumes of boiling acids, searching for the things which God has appointed to make the necessary food of all that live, whether vegetables or animals.

Large Pigs—Berkshire Breed.—Timothy Brockway states in the *Boston Cultivator*, that Messrs. John & Samuel Foot, of Bradford, Ct., killed four pigs last fall, two of which were nine months and twenty days old, and the other two were nine months and twenty-eight days old, whose dressed weights were 401, 419, 423, 473 pounds. It is stated that they were got by Mr. Brockway's "Improved Berkshire" boar, which took the premium at the New Haven show in 1845. The pigs were all of one litter.

Barley.

The value of barley for making pork and feeding other animals is not duly estimated by the generality of farmers in Western New York.—As a summer crop its culture can often be made quite profitable. It delights in a rich loamy soil, which is more inclined to clay than sand. 100 grains of barley meal give, on burning, 3 grains of ash. 100 grains of this ash contain, of

Silica,	29.67
Phosphoric acid,	36.80
Sulphuric acid,	0.16
Chlorine,	0.15
Per-oxide Iron,	0.83
Lime,	3.23
Magnesia,	4.30
Potash,	16.00
Soda,	8.86
	100.00

This analysis was made by Prof. Thompson, of Glasgow. German chemists have found something less than 3 per cent. of ash in 100 parts of dry barley. In a good soil adapted to the plant, the quantity found by Dr. T. may be regarded as an average. Supposing that all the straw was returned to the soil either directly, or in the shape of manure, 2000 lbs. of barley, after it was thoroughly dried at 212° taken from an acre, (equivalent to 49 or 50 bushels,) would remove from the earth 60 lbs. of its most valuable minerals. Among these would be 17.80 lbs. of soluble silica or flint, which exists mainly in the hull of barley. The most valuable earthy element in the seed of this grain, as in all others, is *phosphoric* acid. Of this, 2000 lbs. of barley remove from the soil 22 lbs. If barley be fed to swine, horses, or other domestic animals, and all their solid and liquid manure be carried back on the field that produced the crop, the land will be made richer for the operation. This result accrues not from the mistaken idea that *all* or nearly all the matter removed in a crop, can be carried back in the manure, which the crop will yield when fed to animals. All animals literally burn their food in their *warmed* bodies, the gasses and vapor formed by the combustion escaping through the lungs in expired air. 100 lbs. of dry food will make less than 50 lbs. of dry dung and salts in urine. How, then, can the removal of 100 lbs. of barley, corn, or wheat, from a piece of ground, and the return of only 40 lbs. of the *same matter* enrich the soil? This question we greatly desire that every child, whether male or female, 14 years old, should be able to answer correctly. We are pained and mortified at our poor success in persuading those that till the earth that schools to teach the laws of nature which govern the growth of cereal and other cultivated plants, ought to be established and supported for the benefit of agriculture. But let that pass; while we ask again *why it is* that a farmer may take 1000 lbs. of barley from a field, and by restoring only *one-tenth of the same*,

have his land none the poorer by the operation?

It will be recollected that 1000 lbs. of this grain contain at most but 30 lbs. of incombustible earthy matter. By restoring these and 70 lbs. of organized carbon, oxygen, hydrogen, and nitrogen, the skilful husbandman gives back to the soil as much as it furnished toward the 1000 lbs. of barley. But how is the land made richer when we restore not a particle more soluble flint, phosphorus, sulphur, iron, lime, magnesia, soda, potash, chlorine, carbon, and nitrogen, than was removed in the crop?

Some knowledge of agricultural geology is indispensable to the clear understanding of this interesting subject. Consider for a moment the *source* from which all soils derive their lime, potash, phosphorus, sulphur, and other earthy elements of plants. In 100 lbs. of the ash of barley there are 37 lbs. of phosphoric acid, 24 lbs. of potash and soda, beside 7½ lbs. of lime and magnesia. No wonder that this crop requires good land to yield a large amount of seed.

It is the constant abrasion, comminution, and solution of the small particles of rocks, which lie exposed to the meteoric influences of frost, heat, light, electricity, water, oxygen, carbonic and nitric acids from the air, that renovate soils while at rest, when partially exhausted by the removal of crops. *Science* can render the practical farmer most valuable aid in hastening the natural process for bringing back virgin fertility to a worn out field. But alas, the practical man too often scorns the proffered light of science. He ridicules the idea of having his sons study the properties and source of the constituent elements, which God has appointed to make the bread, the meat, and the clothing of all rational beings.—We rejoice however in the strong faith that this deep prejudice against the study of the natural sciences which have so intimate a connection with rural industry, can not last always. Our children's children, if not our own offspring, will see the end of it.

As a bushel of barley can be grown on some soils about as easily as a bushel of oats, who would not give a trifle to know by actual experiments the relative value of 200 lbs. of barley meal and a like weight of corn meal, for making pork, beef, and mutton? By making meal into well cooked pudding, and mixing it with boiled or steamed potatoes, a little slop from the kitchen and dairy, pork can be made at no great expense, while the dung and urine from the pig sty will make great barley next year. We are much in favor of that system of husbandry which consumes the largest amount of the products of the farm at home, and carefully saves, and uses to the best advantage the manure thus made. We have often help to harvest from 45 to 50 bushels of barley on an acre, and have seen it much used in fattening hogs. But its precise value for feeding has never been determined.

Cheese Making.

THE first thing to be looked after in a cheese dairy, is to provide a dozen or more good cows, and these with a full and regular supply of nutritious food. Upland pastures, or herbage that grows on dry land yields more cheese per gallon of milk, as well as more per week from the same cows, than grass which grows on wet, sour soils. Having secured a sufficient quantity of milk daily to make a good cheese, the next step is to separate all the curd from the whey and retain as much of the butter or cream in the former as practicable. If this is skillfully done, and the cheese properly salted with pure salt, pressed and cured, a most valuable product rewards the labor of the dairyman. Different persons have very unlike methods for saving rennets, and preparing them for use. We have nothing new or worthy of note to offer on this point. A word of caution, however, to the dairy-woman not to let incipient decomposition in the prepared entrail be such as to impart an offensive taste or odor to the cheese at any time. A defective rennet will spoil an otherwise most valuable curd, which no after treatment can remedy.

When the gastric juice, or animal substance is just what it should be, the use of too much rennet is a very common error. According to Mr. COLMAN, the rule in the best English dairies is to put into the milk no more rennet than will suffice to coagulate the same, or separate the curd in fifty minutes. Dairy women are apt to be in a hurry to get on with their work, and in their impatience throw in and incorporate with the curd too much gastric matter. If the milk is at a proper temperature, a very little will answer the purpose. Mr. COLMAN says "the temperature of the milk, when the rennet is applied, should be from 80 to 84 degrees Fahrenheit." He also remarks that "the dairy-women in some parts of England, who make a very good cheese, make their cheeses cold; that is, coagulate at a very low temperature. This cheese is said always to meet a quick demand. They likewise salt them but lightly." We regard these suggestions as of much practical value; for we have studied with some care the *art* as well as the science of cheese-making.

Various contrivances are in use for cutting or breaking the curd into fine pieces when it is fully solidified. The operation should be performed with care and by an experienced hand. It is easy to rob a cheese of much of its richness before it goes to press.

The quantity of salt to be used is one pound to 42 of cheese. The salt should be of the purest kind. The lever press is preferable to the screw, because it follows down the compression of the curd with an uniform weight, and a screw does not.

As the demand for American cheese is rapidly extending in England, the following comments

on the defects of our cheese by English dealers may be worth copying. Mr. C. says:

"In conversation with one of the largest wholesale cheesemongers and provision dealers in the country, he suggested that there were two great faults of the American cheese, which somewhat prejudiced its sale in the English markets. He is a person in whose character and experience entire confidence may be placed.

He was pleased to say that he had had cheeses from the United States as good as any he had ever seen, and that the general character of the article was greatly improved since the first importations.

But the first fault was the softness of the rind. It often cracked, and the cheese became spoiled from that circumstance. This he considered as owing to the cheese being too rich; if so, it is a fault which may be remedied. The English cheeses soon acquire a great firmness; and I have given above the opinion of an English dairy-woman as to how this is affected. I think proper, however, to add the directions of a most experienced and successful dairy farmer in respect to this matter. He says that the rind may be made of any desired hardness, if the cheese be taken from the press, and allowed to remain in brine so strong that it will take up no more salt, for four or five hours. There must be great care, however, not to keep it too long in the brine.

The second fault is the acridness, or peculiarly smart bitter taste often found in American cheeses. He thought this might be due, in part, to some improper preparation or use of the rennet, and, in part, to some kind of feed which the cows found in the pastures. Both these matters are well worthy of investigation, and that alone can determine.

He was of opinion, likewise, that American cheese would sell better if it were colored like the English cheese. The market for it was fast becoming most extensive.

In respect to American butter, he considered that which usually came here as a most inferior article. (Much of it, I believe, is used, in the manufacturing districts, solely for greasing machinery.) Salt butter, or butter strongly salted, is not saleable in the English market; and especially the salt must not appear. I cannot doubt, however, that presently some of our best June or September butter, put up in lumps, would find a good market here,—if, in truth, we have any to export. The very best fresh butter in London market, however, does not bring so high a price as I have often paid for the best article from the county of Worcester, in Boston market; and I have frequently known the best butter to be sold in Baltimore, and even in Cincinnati market, for half a dollar, a little more than two shillings sterling per pound.

I have seen in England none of the admirable *springhouses* which are to be found in Pennsylvania."

MEAT.—Those of our readers that have the means to make a few fat pigs, sheep, steers, or heifers early this season may reasonably expect a good price for the same. We have to pay 9 cents a pound for beef steak, 8 for veal and pork, and 6 for mutton in this market. Those that get their pork first in the market will receive the largest price.

The demand for meat to go to England will be large, and keep prices above the average in this country. The making of beef, pork, or mutton will be more profitable hereafter, than it has been for many years past. The business is deserving of careful study in all its details.—Good beef and mutton were worth at the last advices from London 9d. or 18 cents a pound and duty free. With good rail-roads to the sea-board, carrying domestic animals without tolls to the State, and a pleanty of ice to pack meat in, it can be sent fresh to England at least nine months in a year from the United States. The subject is a matter of great importance to our readers, and we commend it to their earnest attention.

Making Hay.

THE time to cut grass for making hay is just when the seed begins to form. At this period the stems and leaves of all the grasses contain their maximum of nutritive matter. Delay cutting till the seed is ripe, and all the sugar and most of the starch and nitrogenous elements in the stems, or *straw* of timothy and other plants mown for hay, have been consumed in forming germs for the next generation, and providing them with food. As the chick in a new laid egg must have all the ingredients within the shell necessary to elaborate its bones, organs of respiration and digestion, its brain, flesh, and feathers, so the embryo plant must have within the shell of its seed every element required to form its woody fibre, nitrogenous tissue, circulating tubes, root, stem, and leaves, before it can begin to live on the external food that exists in the soil and atmosphere. The organization of seeds in the ear of corn, wheat, timothy, clover, or peas, has a very exhausting effect on the stems and leaves of those plants.

Grass should never be cut when the dew is on, or when it rains, if it can be well avoided.—Much judgment can be exercised in curing hay evenly, and neither too much nor too little.—Every farmer has his own notion when hay is ready to go into the barn or stack; and is governed more or less by circumstances. A little salt spread over the mow as the hay is deposited will be of essential service.

Scab in Sheep.

A CORRESPONDENT asks us to inform him what treatment he must adopt to remove the disease called "scab," which affects a number of his sheep. First separate the well ones from those that have the disease, that it may extend no farther. Then wash the surface affected by the scab with a decoction made by boiling a pound of plug tobacco in three gallons of water. Care should be taken not to apply too much of this poisonous infusion, for we have seen bad effects from its absorbtion through the skin of persons, when applied for medicinal purposes.

The pustules or sores on the bodies of sheep contain animaleulæ called *acari*, which some suppose to be the exclusive cause of the disease called scab. Whether this be true or not, a solution of corrosive sublimate at the rate of a dram of the salt to a quart of rain water can be used to advantage to kill the parasites, and heal the sores. Blue mercurial ointment is also a good remedy. For further particulars see MORELL'S "Sheep Husbandry"—a cheap and most valuable work, which every man that keeps a score of sheep will make money to purchase at a dollar.

DON'T give your boys the worst tools, and then scold because they cannot do as much as *men*.

Hop Culture. --- Drying, &c.

MR. EDITOR :—In describing the method of drying hops, so as to be understood by one wholly unacquainted with the business, I will first give a description of the kiln, which has been, heretofore, the kind used—at any rate, the kind we have used a number of years, with good success.

It is built by digging into a side-hill to the perpendicular depth of about 7 feet below a line level with the upper side—digging the space for the bottom 6 feet square, and for the top about 14 feet; laying a tier of stone, a foot thick, on the four sides, with a space for a door through the wall on the lower side. Sills are then placed on the wall, into which are fitted joists 3 feet apart, on which the floor is lain, consisting of slats 1½ inches square placed about 1 inch apart, over which is drawn a coarse linen cloth fastened to the sills on the sides. Another tier of sills is then put on, to which is fastened the roof; then the gable ends are boarded up, leaving a door in one end, and a window in each end to let off the steam. Now, after burning 5 bushels of charcoal underneath to heat the kiln, it will be ready to receive the hops, which are conveyed to the kiln in sacks, (made of 4 to 5 yards of cloth each,) and poured on to the cloth to the depth of 8 or 9 inches, spreading them evenly with a rake, taking care to move your feet close to the cloth, so as not to tread on the hops. After the hops are on and windows left open above, it will require much judgment and practice to know how much coal to use, and how often to put it on; which must be regulated by practice, as too much heat will spoil the hops; and again if the heat is not regularly kept up, after the steam has started, it will settle back on to the hops and spoil them. Yet the quantity of coal to be used, for the kiln I have described, will vary but little from three pecks at a time, put on once an hour.

Roll brimstone, or sulphur, is often used in drying hops. We prefer sulphur, and use it in the following manner: as soon as the hops are put on, close the windows above; put on some coal below, and when it becomes coals of fire, put on 5 or 6 large table spoonfuls of sulphur, that the steam of it may all take effect on the hops at once, thereby opening the pores making them look better when dried. In 5 or 10 minutes after the sulphur is put on the windows must be thrown open, and remain so till the steam all passes off; when they may be closed again, and in a short time the hops may be stirred up—those from the outer sides brought into middle—those moved to the sides and all leveled as before. To determine when they are dry enough to take off, will require some experience; yet by examining the stem of the hop and finding it tough with no juice in it, may be considered a good test. The hops, when dry, are taken into sacks by means of a spout on the lower side of the kiln, and carried to the hop house chamber, underneath which is the press, consisting of two upright posts, with a beam across near the top, and two sills at the bottom, to support the posts and prevent them raising. There is also a screw passing through the center of the beam, under which is fitted a box made of plank, so as to be taken to pieces. The inner side of the box is 4½ feet long, 1½ feet wide, and 4 to 5 feet high. When the box is fitted for pressing a cloth is placed under it, and two men tread in hops till it is full, when another cloth is put on the top. The follower is then put on, and the screw turned down as far as desired, when the box is taken to pieces—the cloth brought together on the sides and sewed—the screw turned back—the bale of hops taken up—another piece of cloth sewed on each end, and then it is ready for market.

In the above statement I have taken only a practical view of the subject; but in building a kiln, the approved method would be to build it of wood, above the ground, being some 10 feet below the cloth—the sides perpendicular, and 3 feet above the cloth to the eaves—the inner side of the walls lathed and plastered from the ground to the eaves. Some burn wood in such kilns by making use of stoves.

After all is said and done, hop raising is not generally considered safe business, unless the price exceeds 10 cents *per pound*.

Yours, &c., LINCOLN CUMMINGS.

Augusta, Oneida Co., N. Y., 1847.

The Romance of Rural Life.

MR. EDITOR :—Your correspondent, O. C. COMSTOCK, JR., comes down upon me with a wet sail, for saying that the farmers' sons of Western New York prefer a "barefoot life, in the wild west, to labor in their father's neglected fields at home."

It was not my intention to cross any man's interest, who has a few *quarter sections* to sell in Michigan—much less to underrate the advantages and the true poetry of life, offered to the emigrating farmer boy, by the wild flowering prairies of the west.

> "I'd sooner stop the unchained dove,
> When swift returning to his home of love,"

than rob the emigrant of that *prestige* of future bliss, which is to cheat sickness of its pain, and prevent labor from bringing weariness with it. I only wished to explain, as explicitly as possible, some of the causes which had contributed to decrease the population of some of New York's best alluvial domains? If my simile, "barefoot," when applied to the privations of the new settler, is offensive to any one, my excuse is, that it is neither a plagiarism nor a fiction; it was forced on me by the evidence of my own eyes. Twenty years ago I traveled two days in the north part

of Ohio, then a new country, during which time I saw more of the evidences of meagre fare, more barefoot women, and ragged children, than I had before noticed in my whole life. But I must confess that in all new settlements, there is a noble undercurrent of enthusiasm, a romance of labor, that turns toil to play, and privation to pleasure—animating the present while it gilds the future; a stimulus to action which the *ennuyee* cannot envy, because he has not seen or enjoyed it. How often I have heard a farmer aver, in all sincerity, that he never "realized so much comfort in his life, as when he lived in his log-house, with a puncheon roof, stick chimney and floor of split logs; then, said he, our wants were few and simple, now they are legion. Then pride had not invaded our neighborhood—we all worked and saved, and were animated by the good in prospect; now that we have more than attained that fancied good, the good is only the farther from us, because our wants have increased faster than our means of indulging them. It would seem now, that pride has come among us only to make us the slave of fashion, at the expense of all our homespun comforts, and domestic peace."

If I mistake not, the first settlers of Michigan commenced their struggle in the wilderness with more capital than is usual with new settlers generally, and that their *outward* civilization has increased in direct ratio with their means of indulging it, until the struggle between pride and poverty there is now sufficiently developed to entitle Michigan to be ranked among the more advanced states of the west. Perhaps no other state ever made a more rapid transition from the log-house simplicity to the age of brick and mortar, and paint, and upholstery, and floriculture, &c., &c., than this same peninsular Michigan. But all these *fixed* facts only go to prove the romance of labor; for what man in his senses would ever undertake, with money, to clear up, fence, and put good buildings on a *quarter section* of wild land, with any hope of ever realizing the amount of his outlay in dollars and cents? 'Tis true that hundreds of industrious families have created to themselves a fine estate by such an operation; but it is done at the expense of great economy, self denial, unceasing toil, and a privation that could hardly be borne, save under the influence of that exciting novelty and enthusiasm, which is the romance of labor.

Oh that this magic influence could be invoked, in order that the labor which is now so rarely bestowed on the smooth old all alluvial fields of Seneca, may be cheated of its drudgery, so that our farmers sons may be induced to think and to feel, that with a tithe of the labor and with the same economy and self denial required to make a new farm available, will make them rich on an old one. S. W.

Seneca county, N. Y., 1847.

Fences.

NUMBER TWO.

The most economical, permanent, and withal, respectable looking post and board fence, for general farm purposes, is constructed thus: Let your posts be *large*, not less than eight inches square, and if ten the better. As its durability entirely depends on the life of the posts, let them be of the most lasting timber within your reach—remembering that the butt cuts are worth double to those taken high up in the tree. Set them firmly in the earth, and if you can give them a packing of 4 or 6 inches of lime ridlings or leached ashes, it will wonderfully improve their durability—as will also charring a few inches above and below the surface of the soil. Four and a quarter or four and a half feet is a sufficient height, as animals seldom attempt a board or picket fence of any height. The boards should be hemlock or pine; and if of your own procuring let them be 16½ feet long, or one rod; that length allowing the posts often enough to support the fence, and what is convenient, counting the lengths gives the contents of acres in the field. Four boards should constitute the fence, of 12, 10, 8, or 6 inches in width, placed (beginning at the bottom) at 4, 6, or 7 inches apart, the last one to come to the top of the post, which is to be sawed off about 1 inch slanting, to receive the cap and carry off the water. In putting on the boards, tack them on with one or two eight-penny nails and over the joints and at each post place a six inch batten, and thoroughly nail into each board with twelve-penny nails. The caps should break joints with the boards and slope so as to carry the water from the front.

Such a fence will out last a dozen Presidential campaigns, and is comparatively a very cheap structure. There is in each rod of this fence 60 feet of boards, which, at $5 for hemlock, and in proportion higher for pine, costs 30 cents. The posts 6 cents each, is 12 cts.; and 2 lbs. of nails 12 cts. more; in all 54 cts., and 25 cts. for putting up—say 80 cts. per rod—which is defying time and unruly animals at a very moderate rate.

I have not done making fence yet. I will in my next surround your small premises, Mr. Editor, with an oddity which I like very well, so that if I dont get a hint from you to stop fencing and attend to my own affairs, *I shall go on*, like the old minister of whom his congregation grumbled that he preached too long sermons. He at last agreed to take a short text, which was "*Nevertheless*," and after applying it about a half an hour longer than usual, said, "Now, my brethren, I suppose you are all grumbling that your dinners are getting cold, but *nevertheless*—— I shall go on to the last but two heads of my discourse." It was equal to the balsam of wild cherry—it cured them of grumbling.

Old Farmer Tim.

The Crops and the Season.

JUNE has been a very favorable month for the husbandman. Crops of all kinds have come forward rapidly. Wheat, the great staple of Western New York, has suffered very severely by the ravages of insects and the frosts of winter. In Livingston county it is thought the injury from these calamities is fully equal to one-third of the usual crop. In Wheatland the damage is estimated, by the most intelligent farmers, at from one-third to one-fourth of the ordinary yield.—After taking much pains to obtain valuable information, we suppose that the Hessian Fly (*cecidomyia destructor*) has destroyed about 700,000 bushels, or one-tenth of the whole product, on a fair average. An equal amount has been lost by winter-killing—making the yield fall short of the usual crop one-fifth, or 20 per cent. Many suppose that this is quite too low an estimate of the damage done by the causes named. Taking all Western New York together, we can not estimate the loss over 1,500,000 bushels. Our wheat growers have still to incur the risk of injury from rust. The weather for the last two weeks has been favorable to the attack of this blighting malady. It has been quite moist and warm, giving a large growth of stem and leaves to the plant.

Accounts from the wheat growing regions of the West represent the ravages of the Hessian fly as alarmingly destructive. The following is an extract of a letter dated

CLEVELAND, Ohio, June 16, 1847.

I have made a good deal of inquiry as to the crops in these parts, and the universal answer is, that the fly is making sad work with the wheat. Some fields will hardly return the seed sown; and the corn, in consequence of the coldness of the weather, is very backward. The best fields I have seen appear only two or three inches high, and some just coming up, whereas last season at this time it was two feet high.

The Cobourg (Canada) Star of the 23d June says:

In the Western Districts and the United States, the brown and white grub are destroying the wheat totally. In our own district numerous fields are being ruined by the same insects. The destruction of the crops appears to be progressing throughout the whole world.

We could easily fill this journal with extracts similar to the above. Although exaggerated accounts are constantly set afloat in the 1800 newspapers of the country, yet there can be no question that the crop of wheat in the United States will be very light, notwithstanding more than the usual breadth of land was sown last autumn. In our August number we shall have something to say on the best means of avoiding the attacks of the Hessian fly.

Corn and potatoes now promise an abundant yield. How far the latter crop will suffer from the rot, time alone can disclose. We shall have a large surplus of corn to send to Europe if it shall be needed.

Wool is coming into this market very freely. Our impression has been, and still is, that the price of this staple will advance some on present rates before October. Should the crops in England come in as favorably as we have reason to expect from our foreign journals, all the woolen mills, suspended in consequence of high prices for food, and the exportation of specie, will be set at work, and create a foreign demand for American wool, not large to be sure, but enough to cause an advance on present rates in this country. For prices see market report.

Improvement of Sheep from Home Stock.

MR. EDITOR:—Amongst the numerous agricultural Improvements of the day, and the multifarious pursuits of the farmer, the breeding and improving of domestic animals is of the most importance to the cultivators of the soil, and to community at large—and none more so than the improving of Sheep, by uniting the greatest value in both carcass and fleece, which can be done to a great perfection if farmers will but be judicious and persevering in their breeding. And those enterprising gentlemen who are at the trouble and expense of introducing choice and valuable animals from abroad, deserve the highest praise, as being the promoters of the best interests of society. But yet this desire of having the name of an importer is sometimes carried too far, even at the expense of the farming interest. Every encouragement ought to be given to the farmers of our own county, and even section, to make these improvements. Farmers should always purchase near home, if they can procure as good animals as those from a distance. By doing so they will save trouble and expense, encourage a spirit of improvement at home, and promote the general interest of their own country—for the more agricultural productions of any county, or section, can be increased or improved in quality and value, in the same ratio will the prosperity of the country be increased.

In passing through the west part of Livingston and the east part of Wyoming, in May, I called upon Mr. ALEX. BOYD, in Covington, Wyoming county, to see his splendid flock of Merino sheep; and for size and symmetry of form, and hardiness in appearance—for eveness, fineness, and weight of fleece—I have not seen their superior, even amongst the Vermont and Connecticut sheep which have been brought into this section from those states, and that too at great prices. I was informed that there were several other flocks in that section which were not much inferior to Mr. BOYD'S, so that the farmers of Wyoming might accommodate themselves with choice sheep at much less expense and trouble than going abroad for them—and at the same time encourage the spirit of improvement at home, and increase the value of the productions of their own county. WM. GARBUTT.

Wheatland, June, 1847.

Corn Culture.

Mr. Editor:—In the last (June) number of the Farmer, is an article "On Growing Corn," over the signatuae of "J. D. C.," containing the following recommendations in regard to the after culture of this valuable plant: "When you have got through with the process of first weeding and light earthing, then put on your plaster."

We have practiced with success the mixing of plaster and ashes in equal proportions, with an addition of one peck of salt to every two bushels of the mixture, and applying as soon as the corn was sufficiently up to distinguish the rows. An early application is preferable if the grub is at all troublesome, or the corn comes up sickly and yellow. Then comes the following suggestion:

"The remaining team work should be done with the plow, in order to bring up the soil to the rays of the sun, and also within reach of the fibres of corn that are despatched in every direction of the hill, to secure nutriment for the stalk."

Of this 'remaining team work with the plow,' I wish to say a few words, as the doctrine of plowing among corn does not exactly harmozize with the principles laid down in my philosophy. I have condemned the principle from theory, practice and observation, and the following are a few of the reasons for so doing: No plant, whether in its natural or cultivated state, will ever put out its fibres or roots deeper in the soil or farther from the stock than the nature of the plant requires. Corn, for instance, spreads the most of its numerous fibres within a few inches of the surface of the ground; in fact all the fibres that afford any essential nourishment to the stock lie within the depth of the original plowing for the preparation of the crop. Now nature will bring these roots just near enough the sun to be benefited by its genial influence,—and just far enough from it to protect from its scorching heat, without the use of a plow to give them an occasional airing, or sever them in twain just at the point beyond which the parent stock received the greatest portion of its nourishment.

Who would consider it beneficial to occasionally clip the roots from a tree, and expose the bleeding wound to the sun's rays, and then indulge the vain hope of adding to its growth and and beauty? The result would be just the reverse. Infinitely more so is this the case when practised upon a tender plant of corn, the roots of which, in many cases, grow to a greater length than the stalk itself. More than two-thirds of the fibrous roots of corn pass the point indicated by the plow as commonly used in cultivating corn, when planted three feet in the row. This accounts for the fact of corn "standing still," as farmers generally term it, for a few days after hoeing and hilling. I have noticed some pieces in dry seasons, when deep plowing was practiced, that did not "stand still," but went *backward* so fast for a time that they never regained their former appearance—the owners all the while wondering what could be the matter; the pesky worms or some other confounded thing must be at work, when in fact it was nothing else than the pesky farmer himself!

I know not where this practice of plowing among corn was first obtained, but one thing is certain, it ought to be banished among the things that were. In plowing also, one portion of the root is laid bare, while the remaining portion is covered twice its original depth. I have never seen any thing of this kind indicated in tracing any of the fibrous roots of corn as they exist in their natural state; hence I conclude it is a violation of a natural law in the economy of corn culture, and consequently a pernicious practice.

Keep your corn free from weeds; cultivate freely without disturbing the roots, always keeping the surface as nearly level as possible; and if very dry cultivate still more freely, for it is a established fact that a well pulverized soil, frequently stirred, will retain more moisture than a compact soil left undisturbed—and if the necessary requisites were attended to in preparing the soil, the laborer will be amply rewarded for his toil.

A. Zoller.

Minden, N. Y., June, 1847.

Van Brocklin's Patent Clevis.

The annexed figure represents a *Cast-iron Double-gauged Clevis*, recently patented by Mr. J. Van Brocklin, of Middleport, Niagara county, N. Y.

This Clevis has been introduced in this section, and we learn that it is considered a valuable improvement by those who have tested its merits. The main Clevis is made of cast-iron, secured to the plow with wrought-iron bolts, With this Clevis a plow can be s gauged as to run or from land—aa also to plow deep or shallow, at the option of the holder. It is cheap and durable—and as it is warranted, no one will be the loser by trying the article.

The above Clevis is for sale at the Implement Warehouses in this city, as will be seen by reference to our advertising department—page 173 of this number.

M.

Mutability of Wheat and other Cultivated Plants.

MR. EDITOR :—I do not desire to review that interminable subject the transmutations of the grains, but design to give some facts, as stated by some of the best authorities extant, and which are entirely antagonistical to the doctrine of the immutability of genus or species.

A learned German author, Doct. WISSENBORN, in the Magazine of Natural History for 1842, asserts, that *oats* sown in the spring and allowed to be kept down by pasturage, so as not to make seed stems, and kept over till the next spring, invariably produce *rye*, and relates it as a well known fact.

Prof. LINDLEY, than whom no man stands higher as a learned philosopher and botanical investigator, states that, "at the request of the Marquis of Bristol, the Rev. Lord ARTHUR HARVEY, in the year 1843, sowed a handful of oats and treated them in the manner recommended, by stopping the seed stems, and the produce, in the year 1844, was for the most part very slender ears of *barley*, having much the appearance of *rye*, a little *wheat*, and some *oats*, samples of which are now before me."

He also adverts to the extraordinary, but certain fact of the orchidaceous plants, that change their forms from seed, as different from the original as wheat, rye, and oats, by some mysterious agency. Indeed so well known and appreciated is this fact, that peculiar hot-houses are erected in Europe, to accomodate and multiply the remarkable family of Orchids.

Why may not wheat, rye, barley, and even oats, be derived from one common progenitor, which the mysterious laws of nature have developed, in the secret work shop of unimaginable past ages? Strange changes are within even the memory of type and paper. The cabbage was an insignificant trailing sea plant, as was also asparagus; the potato from a wild ground nut, now under its improved state its failure is threatening millions with starvation. In short, three quarters of all our culinary vegetables have been changed by feeding, crossing, and the action of climate.

It is a well ascertained fact that the *fungi*, a distinct but low order of vegetation, take their distinctive forms from the peculiar circumstances of their production, as much as from the original germ or seed; indeed so much so that Botanists have wonderfully reduced the number of species heretofore laid down as distinct.

The Algæ (sea weed,) placed under favorable circumstances, change into plants of a very different structure, and much more elevated in the scale of vegetable organization. Perfectly developed and highly improved animals and vegetables, have a strong tendency to deteriorate—to go backward, on the least omission of the peculiar treatment, that the experience of ages have taught as the requirements of improved organic being. May not the cerealic grains and grasses have one common origin—a unit of original existence?—and the production of *chess* be a relapse to, or towards its original existence?

Man, without education, would be speechless, and the second generation all but one of the quadrumani; the kind and faithful dog would become the ferocious wolf; the hog, the wild and untamable wild boar of the primeval forests. Every thing is subject to transition and change, from its original type to perfection, and for aught we know back again on the retrograde scale to primitive insignificance.

Fresh water molusks, in a marine menstruum, change their vital organization and even the structure of their outward covering, and probably a very small and gradual change in the composition of our atmosphere, from the neighborhood of cemetery influence, or other adventitious circumstances, would people this earth with a race of strangers to the ghosts of the departed, both in the animal and vegetable kingdoms.

Although the prevailing opinion among vegetable physiologists is decidedly averse to the doctrine of transmutation, yet as we are of yesterday and know nothing, every thing that is not capable of analysis and demonstration, should be received *cum grano salis.*

The writer has, in fifty years experience, observed so many cases of the wonderful quantity of chess produced from pure seeding, within his own observation and from undoubted authority from others, which can in no possible way be accounted for, or explained, except by *transmutation*, that his belief in the immutability of *species* is shaken to the foundation.

L. BARKER.

Monroe connty, N. Y., April, 1847.

A Plea for the Birds.

NUMBER TWO.

I AM a lover of Nature. I love her in her playful mood; I love her even in her wildest state. I love inanimate nature much, but animated nature more. I love her for her influence on the heart. I have studied books; I have studied men; I have studied nature. If there is any thing that will humanize, civilize, socialize, and I almost said christianize, the soul of man, it is the study and contemplation of the works of nature. I have yet to find an admirer of simple, unsullied nature, a lover of birds, and trees, and animated groves, who has not a warm and benevolent heart, And I have yet to find one who looks with a cold indifference on the works of creation, whether animate or inanimate, who has not a cold and selfish heart. And I envy not the feelings and the happiness of that man who sees no value in any thing, except that which is

pecuniary; and who estimates every thing by the narrow, selfish standard of dollars and cents.

In my former communication I spoke of the policy of killing birds. I now proceed to speak of the right. I am aware that the right of man over the animal creation is, by some, considered absolute and unconditional: i. e. that he has the right to use all inferior animals according to his pleasure: to kill and to destroy without motive or object, except the qualification of his own will. This is a claim on the part of those who make it, which cannot be conceded by us, nor established by them. Now it cannot be denied that the various animal tribes were created for *wise* purposes, though we may not be able in every instance to trace them. To argue otherwise would be "to charge God foolishly." Neither can it be denied that, to have created them merely to be the sport of a class of beings calling themselves *rational*, would not be a *wise* purpose, unless it be wise for intelligent and rational beings to indulge in a course of action that is calculated, in its nature and tendency, to foster a spirit of cruelty in those who indulge in it.

What, then, is the true meaning of the permission given to man, by virtue of which he claims, and is allowed to exercise, "dominion over the beasts of the field, the fowls of the air," &c. Evidently this: that man should have the pre-eminence; that he should have the right to defend himself and his against the lower animals; the right to employ them for all proper, useful, and economical purposes. More than this cannot be reasonably claimed, or contended for, without imputing either folly or cruelty to the Creator.

To a truly benevolent mind, the idea of taking life under any circumstances is by no means agreeable. The thought of terminating, "forever," an existence, that, for aught we know, may be as capable of enjoyment as our own, is often truly painful, and should operate to damp our destructive ardor. Life should not be trifled with, nor innocent life taken, without a valid reason. We should not rashly, nor needlessly, "take away what we cannot give."

Hence I would lay down the following rules, which I believe to embody the sentiment and doctrine of the Divine permission: 1st. That it is lawful to take the life of any animal, which, if suffered to remain, would destroy either us or ours. This gives us the right over all beasts and birds of prey, venomous reptiles, &c. 2d. That it is lawful to kill, for our own use, whatever lives upon our labor. This gives us the right over our domestic animals. 3d. That it is lawful for us to kill such wild animals as we may need and use for food and other necessary purposes. This gives us the right over such wild animals as constitute what is generally calledgame; as deer, buffalos, pigeons, partridges, water fowl, &c. With this agrees the sentiment so beautifully portrayed by the Poet:

"The sum is this: if man's convenience, health,
Or safety interfere, his rights and claims
Are paramount, and must extinguish theirs.
Else they are all,—the meanest things that are,
As free to live, and to enjoy that life,
As God was free to form them at the first,
Who, in his sovereign wisdom, made them all."

The same exposition of the divine permission will direct us in regard to the manner of taking away life whenever it shall become necessary or proper. To exercise unnecessary cruelty in taking the life of an animal, is no less reprehensible, than to take it away unnecessarily. Hence, whenever life is to be taken away, it should be done in the quickest and easiest manner possible.

Fairport, March 9, 1847. H.

Fence Posts.---Milk and Butter.

Mr. Farmer:—A question or two. Are leached ashes valuable as a top-dressing in setting fence posts? Having got the impression that such was the fact, in making a good fence the other day with red cedar posts, I was at the trouble of hauling leached ashes a mile or two to finish filling the holes; and while in the act, one of my neighbors came along, and, not much to my satisfaction for the pains I had taken, informed me that it was the sure way to make my posts rot, for he had seen it tried. I doubted this, and still do; but should like to have your opinion upon it.

How many quarts of milk, of an average quality, will it take to make a pound of butter?—Some of our villagers who keep cows are loth to sell milk at three cents per quart, because they want to make their own butter. I should like to know how much their butter costs them per lb. at this price for milk.

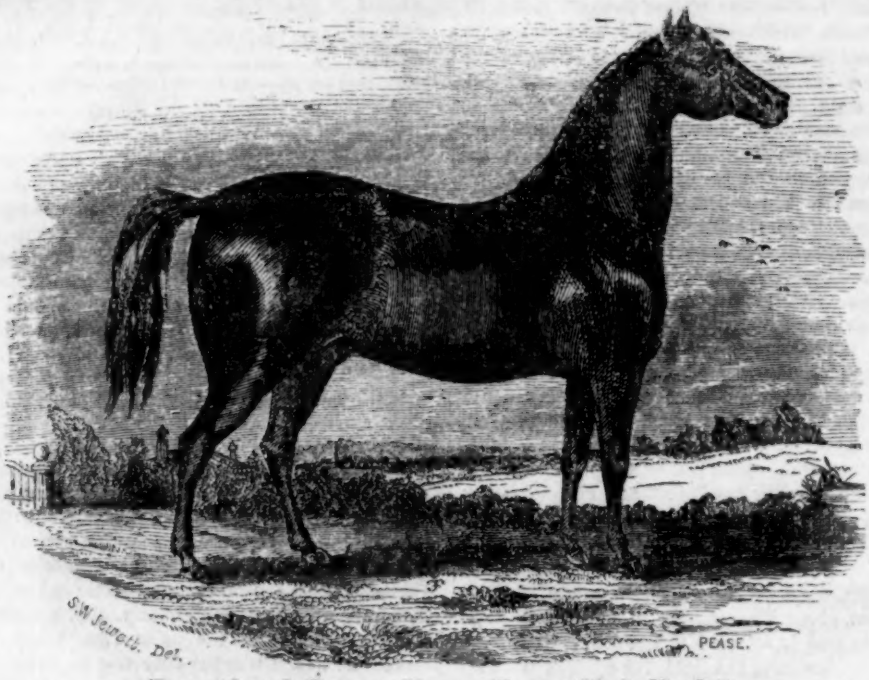
June, 1847. A Subscriber.

Remarks.—Leached ashes will not hasten the rotting of fence posts. The entire cavity around the post in the ground should be filled with pounded charcoal and lime or ashes, which will protect the wood from decay for a long period. Soaking that portion of the post which is to stand in the earth in lime water is also beneficial.

It usually takes from 10 to 14 quarts of milk to make a pound of butter. For the two years preceding the last twelve months, we bought our milk in the city of Buffalo at 2 cents a quart, which was brought 22 miles into the city by railway, and purchased of farmers at *one cent a quart*. They found it better to sell milk at that price than to make butter at 11 or 12 cents a pound.

Grant Thorburn has lately sent to the Emperor of Russia 10 pounds potato seed, at *twenty dollars per pound*.

He is happy who hath a friend at need; but he is more truly happy who hath not need of his friend.



The celebrated Sherman Morgan Horse "Black Hawk."

EDITOR GEN. FARMER:—The above figure was got up to represent the Sherman Morgan horse "Black Hawk," bred by Mr. MATTHEWS, of Dunham, N. H., and purchased a few years since of BENJ. THURSTON, of Lowell, Mass., by D. E. HILL & Co., of Bridport, Vt. He is 12 years old, perfectly sound, of a jet black color, and 15 hands and 1 inch high. Black Hawk is celebrated for symmetry, action, docility, endurance, loftiness in carriage, and great speed in trot. He is a sure foal getter—the colts generally strongly marked after the horse, showing evident signs of the Morgan blood—attaining good size—stand low for their weight—great action and spirit—move powerful, high, proud and graceful—very playful and mild, with clean sinewy legs, very free from long hair, except a small tuft on the fetlock; equal to the most thorough bred horses in this point, with heavy waving main and tails, and sell at remunerating prices.

Black Hawk for several years has been kept entirely for the improvement of the breed, and never used expressly for the turf—though in trotting matches he never has been beaten, having won several purses of from $200 to $500. In a match for $1000, that came off at the Cambridge trotting course, 12th July, 1842, he won with ease (though very fat, and not in train,) against "Osceola," 5 miles and repeat. The first heat was performed in 16 minutes and 30 seconds—the second in 16 minutes. Without training he has trotted his mile in 2 minutes and 42 seconds. On the points of symmetry, action, thorough broke to the harness, and speed in trot, Messrs. HILL last month, through the Cultivator, challenge the world to produce his superior on all of these points: exhibition to come off on the N. Y. State Show ground at the time of the State Show and Fair in Sept., at Saratoga Springs.

Black Hawk has a wide, clean, sinewly leg; short from the knee to the postern; short back; high in the withers; heavy flowing main and tail; deep in the brisket; eyes bright, lively and prominent; open under the jaws; a lean head, face little dishing; open nostrils; small, delicate muzzle; teeth and countenance savage; action high, proud and graceful, moving bold in harness, and true as the spokes in a hub—combining in every respect strength and beauty, and evincing courage and power from the hind fetlock to the tip of the ear.

The Morgans are generally great roadsters, well adapted for all work, good in every spot, except for racers on the turf: in fact, to sum up their respective qualities, they may be called the perfect "Yankee harness horse." The Morgan blood prevail in Maine and New Hampshire, and are favorably known in the city of Boston.—Therefore, all in all, the "Vermont Horse" may be ranked equal, if not superior, to any of the species in any part of the world.

Black Hawk is without fault, except it be in his size. His weight is about 1050 lbs.; many of his colts are 100 lbs. heavier. I have a stallion

and filley, two years old this month, sired by Black Hawk, that measure over 15 hands and weigh over 950 lbs. in ordinary condition.

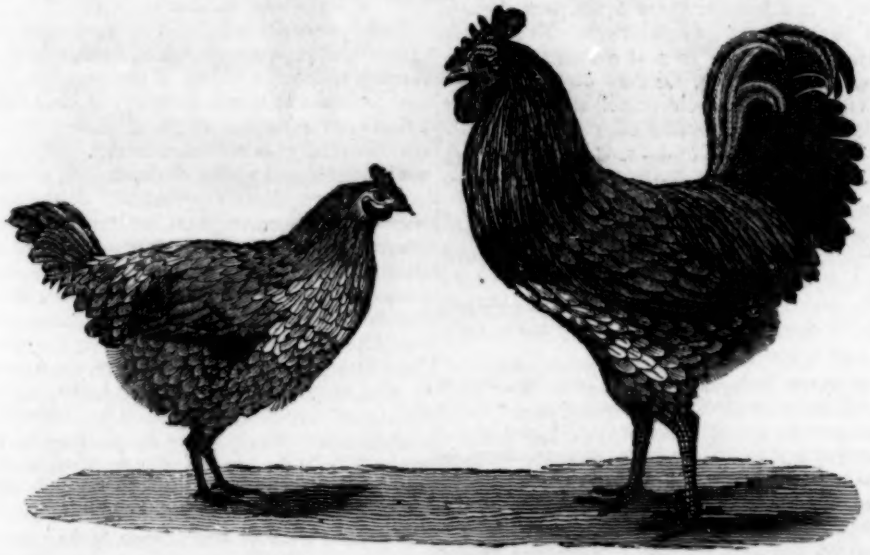
Gen. S. M. Burroughs, of Medina, N. Y., has made a purchase of some of this stock, and those who have seen them must acknowledge the correctness of the above remarks. I anticipate exhibiting some of the colts at your State Fair, and Black Hawk will be on the ground.

Respecting the accompanying portrait:—In many points it delineates the horse. It does not rise bold enough on the shoulder; the head is too clumsy; the tail should have been longer and more waving. It would be quite impossible to show the flat, bony, sinewy legs to perfection, which so much characterize the horse. He is represented, in harness, in the present (May) number of the Cultivator. His contour, in some respects, is there quite well represented—and in others quite deficient, some of which are the most important. Those who will compare both of the cuts will get a very good idea of the horse.

Having complied with your request, Mr. Editor, in giving a brief description of this most noble animal, allow me to close by subscribing myself Yours truly,

S. W. Jewett.

Weybridge, Vt., May 13, 1847.



Cochin China Fowls.

The above are said to be very faithful portraits of the Cochin-China fowls recently introduced into Great Britain by Queen Victoria. They are the largest and most magnificent of the domestic breed known. They were supposed at first to belong to the family of Bustards, but it is now settled that they are genuine poultry. The cocks of this breed, well fatted, weigh alive from 12 to 15 lbs.; hens, from 9 to 12 lbs. Their general color, according to Richardson, is a rich, glossy brown, or deep bay; on the breast is a marking of a blackish color, and of the shape of a horse-shoe; the comb is of a medium size, serrated, but not deeply so, and the wattles are double.—Besides their gigantic size, however, these fowl possess other distinctive characteristics, among which may be enumerated the following:—the disposition of the feathers on the back of the cock's neck is *reversed*, these being turned upwards; the wing is jointed, so that the posterior half can, at pleasure, be doubled up, and brought forward between the anterior half and the body.

"I am not aware," he adds, "whether trial has, as yet, been made of the flesh; but from the white color, and delicate appearance of the skin, I feel confident that they would afford a luxurious and a princely dish. The eggs laid by the hen of this variety are said to be large, of a chocolate-color, and to possess a very delicate flavor. One of the hens, Bessy, exhibited by Her Majesty, laid 94 eggs in 103 days."

The Cochin-China cock has been crossed with the Dorking hen, and the produce is said to be superb. Pullets of this cross have been known to weigh 10 lbs. each at six months old. If the above portraits be correct, we should be afraid the cross would add too great a length of leg to the Dorking, and we very much doubt whether the best specimens could be improved by it. But there are poultry fanciers who will have size let the shape and other qualities of the birds be as they may. For our own part, we much prefer medium-sized poultry as most delicate and profitable. We are not aware that any genuine

Cochin-China fowls have been introduced into this country. A Mr. Nolan has recently imported them into Ireland, and the Queen of England has occasionally made presents of them among her noblemen. We do not know how they can be procured except direct from Cochin-China; and we must say to our friends in advance, that we cannot undertake their importation from any quarter. We here give them all the information we have upon this interesting subject.—*American Agriculturist.*

A Chapter on Hogs.

STRANGE as it may seem, in a county peculiarly adapted, both by soil and climate, to the growth of Indian corn, there is not pork enough fatted in it to feed its inhabitants. Even farm laborers have to buy pork at the villages, from harvest to killing time, for their own support.—The villages obtain their principal supply from Cayuga county, and from Buffalo.

Our farmers have so long been accustomed to consider wheat and clover seed as the only paying crops, that the growth of almost every other product has been strangely neglected; I say *strangely*, because a crop badly put in, and worse tended, is a sort of suicidal farming, which cannot be accounted for on rational principles—and that such farming is practiced, very many corn fields have borne witness.

The great fault in growing pork in Seneca county, is the neglect of the hog from his birth to the time he is shut up for fatting, say 1st Sept.; from that time to killing time, in December, he is fed on new raw corn. The quantity a lean starved animal will consume in two months and a half, is almost beyond belief. Still, so far from being fat, the hog has just commenced fatting when the season has closed, and he must be killed.

I instinctively know the character of the farmer by the quality of pork he offers for sale. When a man brings a long lank carcase, a "streak of fat and a streak of lean," he always complains of the great quantity of corn the hog has eaten.—On the other hand, when a farmer produces a load of pork all fatness, small short legs and short heads, I am certain to hear him aver, that it took only at the rate of five bushels of Indian corn each to fat them; but it was old corn ground and scalded. The first man is behind hand, the last one is before hand, in the art of converting vegetable food into animal fat. If there is no profit in a well fed and fatted animal, there certainly must be a great loss in one that is killed in *working* order, or before it is half fatted. A hog should always be in a gaining condition when shut up to fat; if then weighed every day, it will be found that the gain in weight will much more than pay for the meal eaten, and when the animal is nearly fatted, the gain in fat begins to increase in two fold ratio to the cost of feeding.

I once bought two lean carcases of pork of a farmer who averred that they had eaten seventy bushels of ears of corn. My curiosity way excited, and I went to see his hog pen: it was rectangular, laid up with rails. Across one corner a few rails were laid; they were covered with straw to shelter the hogs at night; the mud over the whole pen, sleeping corner and all, was belly deep. Here the animals had toiled and suffered. Put a fat hog in such a pen and he would stick fast; but nature was too great an economist to permit a hog to fat in such a place—her laws had been outraged, but the farmer's corn paid the penalty. S. W.

Salt and Ashes for Stock.

SOME years since I saw it recommended in an agricultural paper to mix salt with ashes for stock. Having tested the utility of the practice, I am now prepared to speak favorably of it, and from a firm conviction that stock, of all descriptions, are essentially benefitted thereby. My cows, work horses, and young cattle, as well as sheep, have been regularly supplied with it as often as once a week, for two years, and notwithstanding the feed in the pastures, during a part of the grazing period of both seasons, was quite short in consequence of the prevalence of severe drouth, the stock generally has remained in excellent condition; much better, indeed, than I have seen them for years. Sheep, especially, are extremely fond of it, preferring it to fine salt, and partaking of it with almost the same avidity with which, when hungry, they devour their meal or grain. As to the general efficacy of the practice, and its tendency as respects the health of the stock, I will merely say in conclusion, that I am acquainted with several discriminating farmers who have made the same trial, and that in no instance with which I am familiar, or which has fallen under our direct personal observation, has it been attended with other than the best results. The proportions in which the ingredients should be given, are one part salt to seven of ashes.—The salt should be fine, and the ashes dry and free from coals. If thought necessary, the salt may be increased in quantity to two or three quarts instead of one. Try it, farmers, and see if it doth not "do good like a medicine."

In the season of pasturing I usually have several boxes or long troughs placed in a shed or out building to which the animals can at all times have free access, and which I keep constantly supplied with a *quantum sufficit* of the mixture. This plan is necessary as an open exposure of the receptacles would subject the salt to injury in rainy weather.—*Cor. Germantown Tel.*

ISINGLASS and gin, dissolved together by slow heat, makes a good cement for glass.

ROTTEN stone and turpentine, or gin, rubbed on with a clean cloth, gives a fine polish to brass.

Farming on Thirty-five Acres of Land.

J. G. CHADSEY, of Wickford, R. I., states to the officers of the Rhode Island Society for the encouragement of Domestic Industry, that several years ago he purchased thirty-five acres of poor land, for which, it being near the village, he paid the large sum of three thousand and fifty dollars. Only twenty-five acres of it are "tillageable, including three acres of meadow not plowed. The remainder is made up of hills and holes, marsh and beach, with a small strip of wood-land." The arable land is described as uneven, with a gravelly soil, much encumbered with small stones. It had been much worn down by repeated croppings without manure. He let it on shares, but got such poor returns that he was sick of his purchase. Finding that he could neither sell nor rent it, he came to the conclusion to try farming himself, though he had "*done nothing at it for nearly forty years;*" but as a "substitute for experience," he says he took an "*agricultural paper.*" He began cultivating it himself in 1840. He divided the tillage-land into six fields, "from three to four acres each, a new one to be taken up every year, and after taking off three crops, let it lie three years in grass." About two were appropriated to root crops and garden vegetables, which are plowed every year.

His success has been such, that land, which seven years ago would not rent for four per cent., *now pays twenty per cent., after deducting all expenses.* He makes the following statement in regard to the products and profits of his farm for the year 1846 :

10 acres mowing, 19 tons hay, at $12,		$228 00
3 acres corn, 124½ bushels sound, at 80 cts., and 9 bushels offal, at 40 cts.,		103 20
Corn fodder, $25, and pumpkins, $4,50,		29 50
3¼ acres rye, 77 bushels, at 80 cts., and straw sold, $24,81,		86 41
2¾ acres potatoes, 348 bushels, at 37½ cts., and 50 bushels small, at 20 cts.,		140 50
367 bushels onions, at 50 cts.,	$183 50	
836 do. carrots, nearly all sold at 19 cts.,	158 84	
48 do. parsnips, do., at 33⅓ cts.,	16 00	
6 pounds onion seed, and 3 pounds carrot seed,	8 00	
Peppers and sage sold,	41,88	
Produce of 1 acre and 125 square rods,		408 22
Half an acre summer vegetables, mostly used in family—sold,		7 69
Salt grass sold, standing,		24 00
Milk sold,		47 39
Rent received for two gardens,		6 50
Milk, butter, and summer vegetables used in family,		35 00
		$1116 41
EXPENSES.—Paid for labor,	$182 62	
Board of labor,	90 00	
Molasses for drink, 20 gallons, at 30 cts.,	6 00	
Manure purchased, and materials for the same,	31 46	
Seeds of different kinds,	28 77	
Wear and tear of farming utensils,	25 00	
Taxes,	11 81	
Labor done by myself,	50 00	
Cost of Cultivation,		475 66
Cost of land, $3050 ; profits 20¼ per cent. for use of land,		$640 75

Mr. CHADSEY states that he hires all his help except the "little" he does himself. He states that he made 917 pounds pork, and 560 pounds beef, which are not included in the account, as they were fattened on part of the produce before estimated. His stock, he says, consists of two cows and a horse. He buys manure from the village. With the horse he does all the "team work," except breaking up the land. His products for the year 1845, amounted to $913 ; his expenses were $368 ; profits $555.—*Alb. Cul.*

YIELD OF BUTTER.—I noticed in the Cultivator for 1846, p. 157, an account of the yield of butter from a dairy of ten cows, being an average of 211¼ lbs. to each cow. I kept in 1845 four native cows, which constituted my whole dairy. Three of them were of middling quality as milkers, and the fourth one was below middling. From these four cows I fattened two calves killed at four weeks old, and reared two other calves on the milk of the cows. We made during the season 1056 lbs. of butter, besides furnishing milk for a family of eight persons. This would be an average of 264 lbs. to each cow.—The cows were kept as follows : In winter they were fed upon hay, generally three times a day, in some of the coldest weather five times a day. The hay, in the coldest weather, was not always of the best quality. They ran when they pleased to a large stack of wheat straw in the yard. They were not stabled, but had an open shed for shelter, and no extra feed was given them except a slop once a day after calving, till turned to grass, of mill-shorts. My pasture was good. It consisted of about five acres ; the feed a beautiful mixture of early clover, timothy, and some of the finer grasses. It had a light top-dressing of plaster early in spring. The cows were kept in this pasture, with the exception of a few days, till late in the fall, though the drouth was such that our mowing fields produced but little after-feed. The pasture had a good running brook crossing one corner. Other stock was turned in and withdrawn as occasion required, to keep the feed about right. I would not pretend that this dairy product cannot be beat, but I think it is a good yield considering the feed, and that the cows were small, and not high bred.—*J. Wilson in Albany Cultivator.*

EXPORTATION OF APPLES.—ELIHU BURRITT urges the attention of the people of Maine to the raising of apples for foreign market, stating that apples which in Maine are made into cider, or fed to hogs, will command a dollar a bushel in England. The cost of sending them he estimates at twenty cents per bushel.

THATCH on the roofs of houses, may be rendered incombustible by a common flame, by coating it over with a mixture of white-wash and alum. One lb. of alum will suffice for 5 gallons of white-wash.

Forwardness of the Seasons.

To present the reader with a comparative view of the forwardness of the seasons for the last eleven years, I have selected the following facts: the time of the first appearance of robins; the flowering of maple, shadbush, currant, peach, plum, cherry, and apple; the ripening of strawberries and cherries; the commencement of the wheat harvest; and the first frost in autumn.

In 1837, robins were first seen March 26th; peach and plum in blossom May 15th, and cherry May 23d.

In 1838, robins first seen March 24th.

In 1839, robins first seen April 3d; peeping frogs first heard April 2d; maple in flower April 9th; and shadbush [amelanchier canadensis] in flower April 26th.

In 1840, robin first seen Feb. 29th; and shadbush in flower April 23d; first frost in autumn Oct. 13th.

In 1841, robins first seen March 26th; frogs first heard April 17th; currants in blossom May 14th, peach May 18th, plum 15th, cherry 21st, and apple 27th; cherries ripe July 3d; wheat harvest commenced July 28th; first frost in Autumn Oct. 6th.

In 1842, robins first seen March 3d; frogs first heard March 4th; maple in blossom March 3d, shadbush April 23d, currant April 24th, peach April 15th, plum 19th, cherry 22d, and apple May 2d; strawberries and cherries ripe June 11th; wheat harvest commenced July 19th; first frost in autumn September 25th.

In 1843, robins first heard April 3d; frogs first heard April 21st; maple in blossom April 25th, shadbush May 8th, currant May 7th, peach 16th, plum 12th, cherry 10th, and apple 16th; strawberries ripe June 16th, cherries June 23d; wheat harvest commenced July 20th; first frost Sept. 11th.

In 1844, robins first heard March 11th; frogs first heard March 28th; maple in bloom March 9th, shadbush April 14th, currant April 19th, peach 16th, plum 15th, cherry 16, and apple 24th; strawberries and cherries ripe May 25th; wheat harvest commenced June 29th; first frost Sept. 23d.

In 1845, robins first seen March 6th; frogs first heard March 27th; maple in blossom March 25th, shadbush April 21st, peach, plum, and cherry all in full blossom at the same time, April 24th, apple April 29th; Strawberries ripe June 11th; cherries June 10; wheat harvest commenced July 11th; first frost Sept. 22d.

In 1846, robins first seen March 18th; frogs first heard March 25th; maple in blossom March 24th, shadbush April 26th, peach April 29th, plum 28th, cherry 29th, apple May 5th; strawberries ripe May 28th, cherries June 1st; wheat harvest commenced June 30th; first frost October 3d.

In 1847, robins first heard March 22d; frogs first heard April 9th; maple in blossom April 9th, shadbush May 7th, currant 13th, peach 14th, plum 13th, cherry 14th, and apple 21st; strawberries ripe June 9th, cherries June 10th.

It will be observed that the facts proposed to be given are much more full for the last seven years, than for those years prior to this period.

Prof. J. H. COFFIN was requested, by Dr. E. EMMONS, to prepare an article on the climate and temperature of this State for that part of the Natural History of State relating to the subject of Agriculture. He did so; and from that article I give the following results: From the observations made at forty-four localities over the State for fifteen years ending with 1842, it appeared that the mean date for the appearance of the robin was March 19th; the mean date for the flowering of the shadbush, from observations made at forty-eight localities, May 1st; do. peach, from fifty-seven localities, May 2d; do. currants, 58 localities, May 4th; do. plum, 52 localities, May 6th; do. cherry, 52 localities, May 7th; do. apple, 59 localities, May 15th; strawberries ripe, 58 localities, June 12th; wheat harvest commenced, 45 localities, July 25th; first killing frost, 57 localities, Sept. 23d; mean annual temperature, 59 localities, 46.49 degrees.

Thus it appears that the average time over the State for the flowering of fruit trees, (including peach, plum, cherry, and apple,) for the last 15 years prior to 1843, was from May 2d to 15th.

This season, which is regarded as being very late, the peach, plum, and cherry were in full blossom May 13th and 14th; in 1837 they blossomed May 15th to 23d; in 1841, May 15th to 21st; and in 1843, May 10th to 16th. In 1842 the peach, plum, and cherry were in blossom April 15th to 22d; in 1844, April 15th and 16th. In 1842 the maple was in flower March 3d, and shadbush April 23d; and in 1844, maple March 9th, and shadbush, April 14th.

This comparison shows that the present season must be classed with the latest within the period named: not quite so backward as was 1843 or 1841. The reader will observe that there is a difference of more than a month between the earliest and latest seasons, as shown by the appearance of the robins and the flowering of the fruit trees. The observations presented in this article were made, for the last seven years of the eleven, by the writer, and may be relied on.—The others, what few there are, were taken from the Regent's Reports, and are supposed to be, generally, correct. LEANDER WETHERELL.

Rochester, June 24, 1847.

Preservation of Fence Posts.

MR. EDITOR:—I notice in the last number of the Farmer an inquiry, by D. of Ovid Center, relative to the best process of making durable fence or other posts set in the ground. The following I have taken from a Philadelphia paper:

PRESERVING TIMBER.—The simple method of placing timber or wood used for building purposes in a small pond or vat of lime water, is found to be of incalculable advantage. After the timber is cut to the size required, it is immersed in the lime water for two or three weeks, according to its size. Wood that is known to rot in from three to seven years, has lately been found to be perrectly sound after the lapse of more than forty years. Carpenters have found, on working such wood, that their tools quickly become dull, which is owing to the acid of the wood crystalizing by combining with the alkali of the lime.

If you consider the above worthy of a place in the Farmer, you may make such use of it as you may think best. P. G. BONESTEEL.

Victor, March, 1847.

WE give the above with the remark that lime water is worth something to preserve timber, but we doubt the existence of any "acid" in wood that will form crystals with lime. Decaying wood will yield carbonic acid, which will form an insoluble carbonate, if free from an excess of the acid.

TRANSACTIONS OF THE N. Y. STATE AGRICULTURAL SOCIETY FOR 1846.—We are indebted to the Secretary of the above Society, B. P. JOHNSON, Esq., for a copy of its volume of Transactions for 1846. Notice in our next.

HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

We have on hand replies to several correspondents, together with several articles and notices intended for this number, but circumstances render it necessary to defer them till next month. We wished to speak of the Horticultural Exhibion somewhat in detail, but have no space for that purpose.

Horticulrural Exhibition.—The "Horticultural Society of the Valley of the Genesee" held an Exhibition in the City Hall, Rochester, on the 23d of June. The display of Roses and other flowers was brilliant. Fine collections of strawberries were exhibited by the President and others,—and our friends, Donnellan, Mulholland, and others, exhibited some of the finest cucumbers, green peas, radishes onions, and other vegetables, that we have seen at this season. The reports of the Committees have not yet appeared.

Propagation by Layers.

In reply to the numerous inquiries in relation to the process of *layering*, we subjoin the following extract from the "Ladies Companion to the Flower Garden," which explains and illustrates the matter in a manner that cannot fail to be understood. The season is now upon us for performing the operation, and will continue through this and next month.

Layering is a mode of propagating used both in the case of ligneous and herbaceous plants, and the operation is performed by choosing a young shoot of the current or the preceding year, bending it down to the ground, and covering a portion of it near the extremity of the shoot with an inch or more of soil, previously fixing it there with a hooked stick. In general, layers of woody plants made in autumn may be taken off about the same season the following year; but some trees and shrubs, such as Magnolias, the tree Ivy, &c., require to remain on the tree for two years. Roses layered in the summer season with shoots of the same year's growth may be taken off the following spring; but the general practice is to layer them in autumn or winter, and allow the layers to remain on the plants for a year. Layers of herbaceous plants, such as Carnations, Pinks, Double Sweet Williams, and Chrysanthemums, made in the beginning of summer, will have made roots by the autumn; and the layers of Chrysanthemums so rooted will flower the winter of the same year. To facilitate the rooting of all layers, whether ligneous or herbaceous, a notch or slit is made in that part of the shoot which is buried in the soil; or it is twisted, and a portion of the bark taken off, or it is in some other way wounded, bruised, or injured, so as to check the return of the sap by the bark, when the sap accumulating at the upper lip of the wound forms a callosity there of granulated matter, from which roots are soon after emitted. In laying herbaceous plants, and more especially Carnations, the slit is made on the under side of the shoot, and in the case of woody plants on the upper side.* In both cases, the knife is entered immediately below a bud or joint; roots being always more freely protruded at the joints of plants, than in the intervals between them. The cut is generally made half through the shoot, and continued up half an inch or an inch, and to keep it open a small splinter of wood, or a small flat stone, or a piece of slate, or a potsherd is put in between the divided parts to irritate the wound and cause it to protrude granulous matter.—(See fig. 36.) In layering herbaceous plants, it was formerly the custom to shorten the leaves remaining on the layer, but in modern practice this is considered unnecessary, and even injurious, by lessening the powers of the leaves to elaborate the sap. The leaves are always stripped off that part of the layer which is buried in the soil; as shown in the layer of a Petunia, (fig. 37.) In layering some woody plants, such as certain kinds of Roses, Tree Peonies, &c., the entire shoot is laid down, and the knife entered immediately below each eye; and, the wound being kept open by splinters of wood or stones, the whole shoot is covered with earth to the depth of half an inch or an inch, according as the soil is sandy or loamy, and a shoot is afterwards sent up from each eye, so that a shoot thus laid down produces nearly as many plants as it has buds.

Fig. 36. *Layer of a Carnation.*

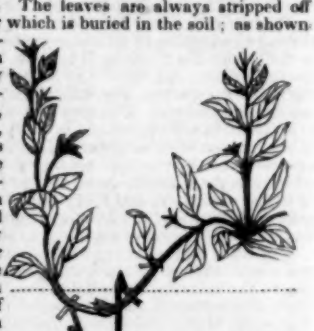


Fig. 37. *Layer of a Petunia.*

This practice is much more successful with some kinds of shrubs and trees than with others, and it is not at all applicable to herbaceous plants. Some shrubs, such as the Honeysuckle, Tecoma, Wistaria, &c., which produce long shoots, and continue growing throughout the summer, may be pegged down as they grow, and a slit made behind each bud, or every other bud, covering the joint so treated with soil. A great many plants are thus produced from a single shoot in one season, more especially in moist, warm summers, or in a warm situation, where water is applied artificially. Layers of every description root most freely in sandy soil, in an open airy situation; and those which are difficult to root succeed best where the soil is almost a pure sand. The layering of Carnations is an operation particularly suitable for ladies, more especially when the plants are in pots, as they can be placed on a table or bench, and there will be no occasion for stooping.

* We consider it preferable in all cases to make the slit on the *under* side.—Ed.

MARRIED,

In this city, on the 24th ult., by the Rev. Wm. O'Riley, Mr. PATRICK BARRY to Miss HARRIET HUESTIS.

☞ The Editor of this Department, as will be seen by the above, has recently been engaged in *preparing for the press* a very useful and ornamental work. We presume our numerous readers will unite with us in congratulating him upon an occasion so important and auspicious—wishing him happiness and prosperity, and beautiful and abundant fruits as the reward of his laudable enterprise.—Pub.

Pruning.

IN the May number of the Farmer, we presented an extract from the "Gardener's Chronicle," with cuts illustrative of the practical use of the knife in pruning. We hope that those of the readers of this paper who are personally engaged, more or less, in the culture of fruit trees, will give this important subject due attention.—Not a day passes over our head that we are not questioned, again and again, on this subject of pruning. Presuming that the previous article relating to the handwork has been properly regarded, we proceed with extracts from the same source, on

THE PRINCIPLES OF PRUNING.

The general principles of pruning, as distinguished from handword, are few in number, and among the easiest of all things to understand; but their application is manifold, often difficult, and always special. For example, it is an axiom that hard pruning produces barrenness, and that slight pruning leads to productiveness; a second well known law is that the removal of one bud or branch strengthens another; a third law teaches us, that to stop a branch by cutting away its extremity, compels what is left to produce side branches, which might not have otherwise appeared. Then again, the necessity for using the pruning-knife at all is often obviated by the employment of the finger and thumb; that is to say, a young branch may be prevented from appearing by pinching off its bud as soon as it begins to push, as well as by first allowing it to grow, and then removing it—and better. All these, and all such, facts are plain to the meanest capacity; the difficulty is how to apply them, and who, and where. The answer to such questions is only to be found in experience, and in a very careful examination of the peculiar mode of growth of each species of tree to be operated on. For no two species of tree can be found of which it is the nature to grow, and flower, and fruit, exactly in the same way, and every variation in the manner of growing, flowering, and fruiting, demands a corresponding variation in the mode of applying the principles of pruning.

We know, indeed, of but one general fact which may be, we would rather say should be, invariably attended to, and that is the universal necessity of keeping branches thin.—Light in abundance, and the freest circulation of air among leaves, are of vital importance to all plants; but these cannot be secured unless the branches are left thin. A crowd of branches implies a crowd of leaves, and in a crowd leaves can neither breathe nor perspire, nor feed; in fact they are smothered. But when they stand well apart, they breathe freely, perspire profusely, and feed incessantly; the result of which consists in fine, strong, stiff shoots, and dark green fat leaves, instead of spindling twigs and yellow weasened foliage.

It is true that this statement appears at first sight to be opposed to a common physiological axiom that the health of a plant is in proportion to the number of its leaves; because it is probable that a well thinned fruit tree will have much fewer leaves than a plant left to grow wild. But the axiom alluded to is put in inexact words; as our correspondent "W." very properly remarked in last week's paper, it is not the mere number of leaves that determines the health of most plants, but the superficial area of foliage exposed to light and air; a material difference. For example, suppose that one branch has but 10 leaves, the whole area of which shall be expressed by the number 100; and that another branch has 20 leaves, the area of which shall be equal to 120; the inference would not be that the latter would conduce to the health of a plant more than the former, unless it could also be shown that the 20 leaves were each as well lighted and aired as the 10, which in the head of a tree would be improbable. And if the 20 leaves had only an area of 90, it is clear that they would be less effective than the 10 having an area of 100, all other circumstances being equal. Of course we do not mean that a gardener is to calculate the exact superficial contents of a leaf before he can tell whether to remove it or not; we only put the argument into this form for the sake of illustration. Such being the general facts connected with the operation of pruning scientifically, we shall proceed to details, and commence with the Pear-tree, the most important of all our hardy fruit trees.

PRUNING THE PEAR TREE

May be considered under the following heads:—first, when it is grown as a *Standard*; second, as a *Dwarf*; and third, as trained against a *Wall, or Espalier*.

In pruning it is always necessary to bear in mind the natural disposition of a tree, in order to foresee the probable consequences of every cut that is made. When left to its natural growth, the Pear-tree, generally speaking, aspires to a height of 30 to 40 feet, or more, with a stem occasionally of considerable length; but frequently subdividing at less than 6 feet above the surface of the ground; and the lower the subdivisions take place, the greater their tendency to assume the naked character of stems to a distance of several feet from their bases. Ultimately the top is formed of a roundish, spreading, or pyramidal form, on the outside of which the fruit is for the most part produced, and hence it occupies the best position for enjoying the beneficial influences of light and air.

An example will put in a clear light the necessity of studying the natural disposition of this tree. Suppose a person were required to keep a tree within certain prescribed limits far short of its natural height, and that, regardless of its incessant tendency to attain that height, he cut annually with reference merely to the assigned limits. Year after year he would find these limits exceeded by a shoot or shoots disposed to mount as stems, and he might consume a life-time in vain attempts, by direct opposition, to subvert the natural tendencies of the tree. A skilful pruner, on the other hand, would attempt no such thing. He would not labor to waste thus the energies of his tree; but by gentle and scientific means, he would direct them towards the production of fruit, as will be hereafter explained.

These remarks serve to show that the *Standard* form being the most natural, requires the least opposition of growth by the knife, and therefore its pruning may be first detailed.

If we commence with the young tree, having one shoot or summer's growth from the graft or bud, technically called a "maiden" plant, the first object is to rear a stem of the requisite height, and of sufficient strength; 6 feet of clear stem is a usual height for orchards. It is possible to have every stem of this height or within an inch of it more or less. The shoot above alluded to, and indeed every shoot will be seen furnished with buds from bottom to top; and every one of these buds is capable of producing a shoot under favorable circumstances; but the uppermost bud generally takes the lead, whilst many of the lower do not break into shoots, and frequently none of them do so, unless induced to push by artificial means. Now, it must be especially borne in mind, that if the shoot be cut back some portion of its length at the winter pruning, the sap which otherwise would have gone to the upper portion of the shoot, is appropriated by those buds that are left; and it acts with greatest force on those immediately below the wound, three of which are almost invariably stimulated so as to produce shoots. Therefore, when the plant has attained the height of not less than 6½ feet, take a six-feet rod, place it by the stem, cut above the third bud beyond the top of the rod; and thus the height of the stem will be determined. The three buds immediately above the 6 feet, being those next the cut, will seldom fail to push shoots, from which others must be made to diverge in a regular manner, forming the principal limbs of the tree.

Care should be taken to have the young stems of sufficient strength; in fact as strong and likewise as straight as possible. They are too frequently seen of almost an equal thickness, tall enough, but flexible as a Willow, and straight only when tied to a stake. Such is invariably the case when the stem, in shooting up, is divested of leaves, with the exception of a few at the top. The reverse of this barbarous practice should be followed. An abundant foliage should be encouraged. A long naked slender rod bearing only a few leaves, is not that natural mode of growth by which the wild Pear-tree forms a strong erect stem without the aid of stakes. A young stem with 50 leaves will increase in substance, at least five times as much as one with only 10 leaves, all other circumstances being the same.—Again, if these 50 leaves grow on a shoot all along from its base, that shoot will be found an elongated cone, a form of growth more substantial than would result from the same number of leaves, or even more, situated on branches at the top of an elsewhere naked stem. The same quantity of substance may be deposited by the latter arrangement, but more equally along the stem, and the stem itself may be compared to a stream which receives no tributaries in its course.

Clean stems are desirable, but in endeavoring to obtain such their strength must not be sacrificed. If laterals push from the shoot of the same summer's growth they must not

be cut clean off; they may be stopped after mid-summer where they appear insubordinate to the leader; and instead of being cut close to the stem at the winter pruning, if one or two buds are left, these buds will furnish leaves on small shoots in the following summer, which will contribute much towards strengthening the stem; these shoots ought, however, to be stopped in summer.

When the soil is good and the variety of vigorous growth, standard Pear trees may be reared without cutting back the leader till it attain the required height of stem. But under less favorable circumstances a somewhat different mode of proceeding is advisable, especially where stakes cannot be afforded. If the leading shoot is found weak, head it back to near its base; a stronger shoot will result, which must be kept as strictly upright as possible for a leader. Take care to check almost entirely the growth of the two shoots likely to proceed from the buds situated next to that which furnishes the leader. The latter may be a little shortened in the following season, and in every season, till it attain the proper height. By the time it does this the base of the stem will have acquired considerable thickness, and although great care is necessary to keep the shoots erect while young, no stakes are afterwards required. This mode of rearing stems should be exclusively adopted in all exposed situations, and in many other cases it will be found obviously advantageous.

The Chinese Wistaria.

Our pages were adorned last month with a portrait of the *Yulan*, or Chinese White Magnolia, the pride of lawn and pleasure grounds in April.*

Another hardy twining or climbing shrub, from the same "flowery land," is the gem of the garden and shrubbery, in the month of May.

It is, indeed, one of the loveliest of all vines of a shrubby character. Its clusters of delicate pale purple (or French gray) blossoms, are so numerous and so large, each raceme being 11 or 12 inches long, that they are highly attractive. Their perfume is delicious. The plant is perfectly hardy in this latitude, and will bear a temperature of 10 or 15 degrees below zero. It grows freely in almost every soil, and, in a deep, rich loam, frequently makes shoots 20 or 30 feet long in a single season. Its foliage is abundant, and its color is a lively, pleasant hue of green. In a few words, we cannot but agree with Loudon, in thinking it "the most magnificent of all hardy deciduous climbers."†

When this plant was first introduced into Great Britain from China, about 30 years ago, it was sold for six guineas a plant, and it was considered too tender to bear the open air. It may now be had in all the large nurseries in this country, at from 30 to 50 cents each, and is found to be perfectly hardy. As it is easily propagated by layers and cuttings, and requires no further than a slight training care, when once planted, we hope to see it, and the *Double Michigan Roses*,—two of the finest of hardy climbers yet known, for the middle and eastern states—become the ornament of every rural cottage and country house in the land. The comparative freedom from insects, the permanency and vigor of these climbers, added to their great beauty, must soon make them universal favorites. The genus *Wistaria*, was named by *Nuttall*, in honor of Dr. Caspar Wistar, the celebrated Philadelphia *savan*.

There is also an indigenous species sometimes called the Glycine, *Wistaria frutescens*, a native of Virginia and the south and west. Though a pretty climber, its clusters of flowers are not more than a third of the size of the Chinese species, and it is much less ornamental, as well as hardy, in the northern states. Its flowers are produced later, or towards mid-summer.

A new variety of the Chinese Wistaria has lately been brought out to England, by the celebrated collector to the London Horticultural Society, Mr. Fortune. Its blossoms are *white*, and the effect of this and the purple flowered species will both be benefitted, by planting and training them together. We have not learned as yet, of its introduction into this country.

We find the following interesting hints for making the Chinese Wistaria a *perpetual bloomer*, in *Paxton's Magazine of Botany*.

"Mr. Knight, of the exotic nursery, Chelsea, has a simple method of causing this plant to flower three times a year, by the following treatment: After the first flowering is over, which will be about the end of May, he strips off all the leaves, and cuts off all the young and superfluous shoots which have been formed, to within a few eyes of the stem, which causes it to throw out fresh leaves and to flower again in July and August; and after this flowering is over, the same process is repeated of cutting off the leaves, and this causes it to flower again in the months of October and November. It may be said that this plant will naturally flower twice, and sometimes thrice, in the season; but, when it does, (which is but very seldom,) the flowers are so very weak, and there are so few of them, that it is never worth notice; whereas, by the above simple process, an abundant succession of flowers may be insured throughout the whole season. It should be remembered that these remarks will not apply to *young* plants, but only to those that are well established."

Sometimes we have seen plants sent out from the nurseries, which appear for a long time after to have a dwarfish, stinted habit, and do not climb freely. This is probably owing to their having been raised from downward or impoverished branches. It is necessary in such instances, to head the plants down to a single bud, as near the ground as possible, and to make the soil rich and deep, where they are planted. This will give them a vigorous start, and they will afterwards maintain a natural state of luxuriance.—*Hort.*

* The portrait of the Wistaria, intended to accompany this article, is necessarily omitted, the engraver having failed to get it ready in season.—Pub.

† The Chinese Wistaria, though it will grow over arbors, pillars, or in almost any shape that it may be desirable to train it, appears to thrive best when growing in a warm situation, such as the south side of a building, wall, &c.—There is a plant trained on the south side of the gardener's house, here, which has been planted about twelve years, and which now covers a large space. Every year it has increased in size, and in the number of its blossoms. While we write, (the middle of May,) it is in bloom, and there are 610 clusters of blossoms fully expanded on it.

Horticultural Inquiries.

MR. BARRY:—As the Editor of the Hort. Department of the Farmer, you will confer a favor on me and others, who value the paper scarcely less on account of information found in the pages over which you preside, than of that issuing more directly from your talented colleague, by satisfying the following queries.—

1ST. As to the most approved mode of propagating trees and shrubs, by layers, slips and seeds—especially the last.

2D. As to the Rose, in particular. How to prepare the seed—When and how to plant it—Time of germination.

3D. As to what the dwarfing process consists in—and as to what kinds of fruit trees can profitably be made the subjects of it.

4TH. Can the Fig be cultivated in the open air, and wintered in this climate, and how? Also, can the pea-nut and sweet potato, or either of them, be brought to maturity in this country?

Your brief solution of these queries will, I am sure, gratify many who look to your pages as their only source of information in matters of this kind.

While *asking* I should be happy to *give*. Possibly the following may possess a trifle of interest. In your last Catalogue, in introducing the Michigan family of climbing Roses you remark, among their other virtues, upon "their rapid, vigorous growth"—adding that it measures "*ten* to *twelve* feet in a season." My single Michigan has a shoot of the last season which measures *twenty-four feet*. A double—the same which, I suppose, you mean by "Queen of the Prairies"—obtained at your Garden, and only put down the season before, exhibits this season a growth of *sixteen feet*. J. CHAMBERLAIN.

Yates, Orleans County, 1847.

ANSWER TO THE ABOVE.

ROSE seeds ripen at various seasons, from August to November, and should be gathered when fully ripe. The heps should be put away whole, in sand or light earth, and allowed to remain till the following spring, when the seeds may be taken out and planted in fine rich soil. They should be covered about half an inch deep. Some will germinate the first season, and some will not until the second. If sown in pots, in March, and placed in a gentle heat in a hot bed or green house, they will all germinate the first season. When they have appeared above the ground fairly, they may be pricked out and transplanted into rows; if tender sorts, into small pots.

Roses are increased from *layers* in June, July, and August; (see article on layering in this number;) also by budding during the same period; (see article on budding in July number, 1846.) The various sorts of Boursault, the common Dog Rose, and wild sweet briar, all make excellent stocks for budding upon. The strongest and most durable plants are obtained by budding near the ground. Handsome miniature trees are made by budding on strong stocks 5 to 8 feet high.

Propagation from slips or cuttings requires to be done at various seasons and in various ways adapted to the character and habit of the species to be operated on. For instance—the climbing Roses, *Prairie*, *Boursault*, &c., as well as the *Hybrid Chinas*, may be propagated from cuttings of the ripe wood, taken off in the fall and buried in the ground till spring, when they are planted out. The cuttings are usually from 6 to 10 inches long, and about two-thirds their length is put below the ground. Such as are cultivated in the house, in pots, are propagated from cuttings of young but mature wood, taken off just after the blossom falls. The cuttings may be made of two or more joints, the leaves allowed to remain on the upper part. A great number of such cuttings may be put in one pot. The soil for cuttings should be composed of equal parts of light peat earth and sand. Cuttings made in this way, in the spring, should be placed in a hot bed with a mild heat, watered regularly and shaded well from the sun. Those made at this season (July) may be put in a cold frame and kept well shaded and close.

Pots in which cuttings are placed to root, should be filled one-third their depth with material for drainage, broken pots, in order to allow the surplus water to pass off freely; this is quite important. Small pots, say 3 inches deep and 2 across at the top, if they can be had, are the best, and a single cutting may be put in each. If larger pots are used, the cuttings should be placed around the sides.

Willows, Poplars, Currants, Gooseberries, Quinces, Altheas, Honeysuckles, &c., &c., are prepared, treated, and planted in a manner similar to that described for Prairie, Boursault, and Hybrid China Roses. We will treat upon these matters more fully and satisfactorily at another time.

"What does the dwarfing process consist in?" It consists mainly in propagating trees on such stocks as are calculated to reduce their natural dimensions, and induce early fruitfulness: for instance—an apple, grafted or budded on a paradise stock, may not attain over 6 or 8 feet high, and may be had bearing plentifully the third year, when not over 2 or 3 feet high. The advantages are apparent. Small gardens may contain a great variety, and an immediate return is given.

The Pear, at the present day, is cultivated as a *dwarf*, to a greater extent than any other fruit, and chiefly on the quince stock. To this method we have frequently alluded in the pages of the "Farmer," heretofore. The apple, pear, and cherry, all of which, on free stocks, attain a large size, may be profitably dwarfed to fit them for limited grounds and other circumstances.

We are not aware of any attempt having been made to cultivate the *Fig* in the open air, in this climate—nor do we think it could be done with any profitable or pleasant results. We presume it could be grown in cold houses, similar to those constructed for the culture of the grape without fire heat.

We do not think that the pea nut could be cultivated here. We can not speak positively, as we have no evidence on the subject. It is a native of South America, and is produced abundantly in the open air as far north as Maryland, and farther for aught we know. The French, around Paris, raise it in hot beds and transplant it into the open ground, where it ripens. With similar culture, it might succeed here. We have

seen excellent *sweet potatoes*, raised in this section, in the open air. They should be started in a hot bed, and transplanted to the open ground when the weather is settled and the ground warm. A light sandy soil is the best for them, with a sunny exposure, and plenty of space for their trailing stems to run on.

J. Van Brocklin's Patent Clevis.

WE, the undersigned, citizens of Niagara and Orleans counties, having used J. Van Brocklin's CAST-IRON DOUBLE-GAUGED CLEVIS, do not hesitate to pronounce it the most superior article of the kind ever offered to the public.

This Clevis is perfectly simple in its construction, and is so arranged as to gauge the furrow to the desired depth or width, in every variety of soil, and works equally well with two or three horses.

In cheapness and durability it cannot be excelled, and we cheerfully recommend its use to every farmer as a most valuable improvement.

Phillip Truman,	Solomon Richardson,
Francis B. Lane,	Oliver R. Brown,
Jerome Phillips,	Jason Sawyer,
Ezra Kittredge,	John P. Sawyer,
John Johnston,	Russell Brown,
W. S. Fenn,	Alfred Colwell,
John Kinvan,	Chas. B. Lane,
S. N. Spalding,	Linus Spalding,
Salmon Bickford.	

Middleport, June 9, 1847.

The DOUBLE-GAUGE CLEVIS is Manufactured and sold by the undersigned, Patentee at Middleport, Niagara County, New York. J. VAN BROCKLIN.

Middleport June 19, 1847.

☞ The above Clevis is for sale, in Rochester, by RAPALJE & BRIGGS, No. 18 Front st.: P. D. WRIGHT, No. 120 State st.: NOTT & ELLIOTT, No. 23 Buffalo st.; and WM. KIDD, No. 154, State st. [7-3t-i]

Rochester Commercial Nursery.

BISSELL & HOOKER have sold an interest in this establishment to Mr. WM. M. SLOANE, and the business will hereafter be conducted by and under the style of

BISSELL, HOOKER & SLOANE,

who will execute with fidelity all orders addressed to them.

Mr. HOOKER will visit

ENGLAND AND THE CONTINENT

during the coming winter, for the purpose of purchasing rare trees and plants, and executing any commissions that may be entrusted to him by Nurserymen and others. He will leave here about the first of December next, and on his return will sail from Liverpool as early next spring as trees can be moved. He will personally superintend the packing of all his purchases, and accompany them home, *per steamer*, unless otherwise directed.

Post paid communications promptly answered, and orders respectfully solicited. July 1, 1847. [7-1t]

Short-Horn Durham Stock for Sale.

THE Subscriber has on his farm a few spring Calves, (Bulls and Heifers,) which he will dispose of when three to four months old, at from $75 to $100 each.

These animals were all got by his premium bull *Meteor*, a descendant of his imported bull Duke of Wellington, and heifer Duchess, both of which latter animals he imported from the celebrated herd of Short Horns of THOS. BATES, Esq., Yorkshire, England. These Calves, being out of good milking Short Horn Cows, and possessing through the bulls Duke of Wellington and Meteor, some one half, and others three quarters of the blood of the Bates Bulls, they will be valuable to such as wish to improve their herds.

Troy, N. Y., June 18, 1847. (7-2i) GEO. VAIL.

A Farm Wanted,

SITUATED near Lake Erie or Ontario, in the State of New York. A letter addressed to "FARMER, Newport, Herkimer Co., N. Y.," naming terms and describing the premises, will receive attention. June 20, 1847. [7-2i*]

United States Agricultural Foundry,

MACHINE AND PLOW MANUFACTORY,

502 and 504 Water Street,

WAREHOUSE 195 FRONT ST., NEAR FULTON ST.,

NEW YORK.

THE Subscribers respectfully invite the attention of merchants and dealers in Agricultural Implements to the superior assortment of goods which they manufacture, embracing Plows and Castings, of all the most approved patterns in use, and possessing all the latest improvements in style, workmanship and material. Gin Gear Segments, of various sizes; Wing Gudgeons; Mill Irons; Horse Powers and Threshing Machines, of the most approved construction; Corn Shellers; Corn Mills; Straw Cutters; Store Trucks; Road Scrapers; Plow Bolts, and Castings of every description, all of which will be sold at the lowest prices.

New York, 1847. [7-6i] JOHN MAYHER & CO.

CORN MILLS.

THE Subscribers are now supplied with a newly invented Cast-Iron Mill, for grinding Corn and other Grain, either by hand or horse power. It will grind from 3 to 4 bushels per hour. Price $30.00.

Also the hand Corn-Mill, which grinds from 1 to 1¼ bushels per hour. Price $6.50.

These Mills are highly economical and convenient, and every farm and plantation ought to have them. They are simple in construction, not liable to get out of repair, and are easily operated. When one set of plates is worn out, they can be replaced by others at a trifling cost.

A. B. ALLEN & CO., 187 Water st., New York.

CHEAP PLOWS.

SINGLE-HORSE Plows, from $2.00 to $3.00 each.
Double-horse do. " $3.00 to $6.00 "

The woods of these Plows are made of the best of *White Oak*. The handles are *steamed* and then *bent crooked*, instead of being *sawed* out. This makes them much stronger and more durable. The castings are made from good *new pig iron*, without any admixture of *old scrap*. The wrought iron work is of excellent quality, with *extras* attached to the plows. A liberal discount to dealers. (7-2i)

A. B. ALLEN & CO., 187 Water st., N. Y.

Patent Revolving Horse Rakes, manufactured at Clarkson, by L. SWIFT—the best rake now in use—for sale at the manufacturers lowest prices, at the Genesee Seed Store and Agricultural Warehouse, No. 18 Front st.—the only place in the city where they can be had.

July 1, 1847. [7-1f] RAPALJE & BRIGGS.

Farming Tools, such as Grain Cradles and Cradle Scythes, Grass Scythes and Snaths, Wire-toothed and wooden Horse Rakes and Hand Rakes, Sickles, &c., all a little cheaper than the cheapest, at the Genesee Seed Store, No. 18 Front st., by RAPALJE & BRIGGS.

July 1, 1847. [7-1f]

Subsoil Plows.—We have just received from Ruggles, Nourse & Mason, of Boston, a large supply of their superior Subsoil and Sward C Plows, which we offer for sale at the manufacturers prices—from $7 to $14 each.

July 1, 1847. [7-1f] RAPALJE & BRIGGS.

Bee Hives.—Rich's and Renolds' Patent Bee Hives at the Genesee Seed Store, No. 18 Front st.

July 1, 1847. [7-1f] RAPALJE & BRIGGS.

Agricultural and Horticultural Books, just received and for sale at the *Rochester Seed Store*, No. 4 Front street. Downing's Fruits, &c.; Johnston's Agricultural Chemistry; Morrell's American Shepard; The American Poulterer's Companion; The American Florist; The Florists Guide; The American Gardner, &c., &c. *For sale cheap.* July 1, 1847.

Turnep Seed.—Those wanting a first rate article, and *warranted*, will please be particular to call at the Rochester *(not Genesee)* Seed Store, No. 4 Front st. Also, 500 lbs. Ruta Baga Seed, just received from England.

July 1. JAMES P. FOGG.

50 Bushels Buckwheat for sale at the Rochester Seed Store, No. 4 Front st. JAMES P. FOGG.

Sale of Short Horned Cattle.

In consequence of becoming over-stocked, I will offer for sale, at Auction, at my residence in the town of Auburn, on Wednesday, the 8th day of September next, *forty head of thorough bred Short Horned Cattle*—consisting of about thirty Cows and Heifers, and ten young Bulls. I shall select from my whole herd one Bull, "Symmetry," two Cows, and two Heifers, which I shall not offer for sale. The balance, being about *forty, will be sold without reserve.*

The original cows of this herd were selected from the best of the herds of the late PATROON VAN RENSSELAER, FRANCIS ROTCH, and L. F. ALLEN, Esqs., whose reputation as breeders of fine stock requires no eulogy from me. The younger stock were bred with much care from my Bulls Archer and Symmetry, both of which have received the prize as the best Bull at the Exhibitions of the New York State Agricultural Society. Archer was bred by FRANCIS ROTCH, Esq., out of his famous imported cow "Adaliza," and got by "Rolla," (see Coats' Herd Book, No. 4991.)—Symmetry was bred by GEO. VAIL, Esq., of Troy, out of his Cow Dutchess, and got by his Duke of Wellington, (see Coat's Herd Book. No. 3654, or American Herd Book, No. 55,) both of which he imported from the herd of THOMAS BATES, Esq., of Yorkshire, England. Full pedigrees of all the Cattle will be printed and ready by the 1st of July.—They can be had by applying to A. B. ALLEN, New York; LUTHER TUCKER and B. P. JOHNSON, Albany; Office of the Genesee Farmer, Rochester; L. F. ALLEN, Black Rock; or at my residence

Also, I will sell *ten* three-fourths and half bred Cows and Heifers.

After the sale of the above Cattle, I will sell at Auction, one hundred *Merino Rams*, ten to fifteen *South Down Rams*, sixty *Merino* and thirty *grade Merino Ewes*. The Ewes will be sold in pens of three.

That gentlemen not acquainted with my flock of Sheep may form some opinion of their value, I make the following statement, viz: I have taken *five* clips of wool from my Sheep. The clip of 1846 averaged a fraction over four lbs. per head; this was the largest. One of the five clips I sold at thirty-nine cents, the other four I sold to *one* Manufacturing Company at different times, at *forty cents per lb.—all at my own house.*

Terms of the sale, Cash or approved endorsed notes, payable at the Bank of Auburn, at three months with interest.

J. M. SHERWOOD.

Auburn, Cay. Co., N. Y., June 1, 1847.

Kinderhook Wool Depot.

THIS enterprise has been in successful operation for the past two years, and has fully met the expectations of the wool-growers, who have been its patrons and projectors. It will be continued the present year, conducted as heretofore. The subscriber will be prepared to receive wool as soon after shearing as may be convenient for the growers to deliver it. The fleeces will be thrown into sorts according to *quality* and *condition*. Those who desire it can have their clip kept separate, and sold when ordered. A discrimination will be made between wool in good or bad condition. Sales will be made for cash, and the owners can rely on prompt returns. The charges for receiving, storing, sorting, and selling, will be one cent per lb. and insurance. Liberal advances in cash made on the usual terms. Sacks will be forwarded to those who wish, by their paying the transportation and 12½ cts. each for their use, or if furnished by the owner of the wool, will be returned, or sold at their value, as he may direct.

Reference can be had to Dr. J. P. Beekman, Kinderhook; D. S. Curtis, Canaan; C. W. Hall, New Lebanon, Col. Co.; J. B. Nott, Esq., Albany; D. Rodgers; Hoosick, Rens. Co.; C. H. Richmond, Esq., Aurora, Cayuga Co.; Col. J. Murdock, Wheatland, Monroe Co.

June 1, 1837.—3t. H. BLANCHARD.

PLOWS.

We have now on hand, and offer for sale at the manufacturers prices, seven varieties of PLOWS—among which are the *Iron Beam, Diamond*, and *Anthony's Improved Plow.*

We would particularly invite attention to the Anthony Plow, as it has a patent index attached to the beam, by which to change it from a two to a three horse plow. Farmers are requested to call and examine our stock before purchasing elsewhere. RAPALJE & BRIGGS,

Genesee Ag. Warehouse, 13 Front st.

REMOVAL.

The Rochester Agricultural Ware House has been removed from Front-street to No. 23 Buffalo-street, Talman Block, opposite Reynolds' Arcade. See advertisement below.

Rochester Agricultural Ware-House,

HARD-WARE AND SEED STORE.

(*No. 23 Buffalo st., opposite Reynolds' Arcade.*)

Where can be found most kinds of GARDEN and FIELD SEEDS, Hard-ware, Tin-ware, Wooden-ware, Willow-ware, House Trimmings, Kitchen Furniture, &c.

The late proprietor of this Establishment, (THOS. NOTT.) feels grateful to his many patrons for their very liberal patronage during the past year, and would solicit a continuance of the same—promising to sell them as good articles in his line, and as cheap, as can be purchased at any other establishment west of Boston or New York. He has formed a co-partnership with Mr. E. J. ELLIOTT—and the business of the establishmeut will hereafter be conducted under the firm of NOTT & ELLIOTT.

We shall keep constantly on hand, a full assortment of *Shaker Garden and Flower Seeds*, the reputation of which needs no comment.

We are continually manufacturing the celebrated Massachusetts Sward C Plow—to which has been awarded the greatest number of Premiums—which we shall sell at the low price of $7, with an extra point. Also—shall keep on hand an assortment of the various approved Plows and Points, Cultivator Teeth, Root Cutters, Straw Cutters, and Corn Shellers—with a hundred and one other articles, too tedious to mention.

Farmers from a distance, as also those in our immediate vicinity, are respectfully solicited to call at our new establishment, and examine our assortment before purchasing elsewhere. NOTT & ELLIOTT,

Rochester, Jan. 1, 1847. No 23 Buffalo-street.

To New York Farmers and Emigrants.

ILLINOIS LANDS FOR SALE.—115,000 acres, in tracts of 40, 80, 120, 160, acres, or more, to suit purchasers. The lands are all first rate, and among the very best in the State, and are situated in the counties most densely settled, viz: Morgan, Scott, Cass, Mason, Menard, Green, Sangamon, Logan, Christian, Macon, McLean Woodford, and Macoupin. To actual settlers every reasonable indulgence will be given as to time of payment. The price from $3 to $5 per acre.

A correspondent of one the New York papers writes, respecting this section of Illinois, as follows;

BEARDSTOWN, Cass Co., Ill., Jan. 10, 1846.

The Riches of the West—Gothamites on the Wing.—It is now six weeks since I left the city of Gotham, during which time I have seen considerable of the Western country, and I must say the beautiful prairies of Illinois far excel what I had anticipated, and this country may truly be called the garden of the world. There is nothing to prevent farmers in this country from getting rich, as the land is the most fertile in the world, and it will produce everything grown in the vegetable kingdom.

A New England man would hardly believe me if I would tell him that some farmers here produce ten thousand bushels of corn and half as many bushels of wheat in a year, to say nothing of cattle and hogs, of which some raise as many as five hundred head. One farmer told me he had raised, the last year, 6,000 bushels of corn, and it was all produced by the labor of two men only.

Cattle and sheep feed upon the prairies all winter, as they are seldom covered with snow."

Most of the above lands may be cultivated 100 years or more without manuring, being of the richest alluvial soil. The titles are indisputable and the lands will be sold at low prices and in quantities to suit purchasers. Letters (post paid) addressed to D. B. AYRES, Esq., of Jacksonville, Ill., or to the subscriber, will receive prompt attention. As many persons out of the State have an idea that the taxes are very burdensome in Illinois, we state that they range from $1,50 to $2,00 per annum on 80 acres of land.

JOHN GRIGG,

No. 9 North Fourth-st. Philadelphia.

March 1, 1847. [3t]

Genesee Seed Store and Agricultural Warehouse.

No. 18 (OLD No. 10,) FROST ST., ROCHESTER.

AT this Establishment can be found all sorts of GARDEN and FIELD SEEDS, a large and excellent assortment of Flower Seeds—a large lot of Clover and Timothy Seed, Orchard and Lawn Grass, Red Top, Lucerne, White Dutch Clover, Millet, Hemp, Flax Seed, Spring Wheat, Spring Rye, Buckwheat, Barley, Oats, different kinds Peas and Beans, Seed Corn of different kinds, various kinds of Seed Potatoes, Potato Onions, Onion Sets, Top Onions, &c., &c.

IMPLEMENTS, MACHINES, &c., such as Pennock's Patent Wheat Drill—Broad Cast Sowing Machines—Corn Planters, Seed Sowers, Fanning Mills—10 different kinds of Straw Cutters, prices from $3 50 to $26—Plows as follows: Massachusetts Subsoil, various sizes, do. Sward C, do. Eagle 25, do. different sizes Side Hill, Michigan Subsoil, Delano or Diamond Plows, Burrall's Wheel Plow, Wisconsin Plow, Gang and Corn Plows, and several kinds of plow points—Cob and Corn Grinders, different kinds of Corn Shellers, one and two horse Cultivators, Langdon's Horse Hoe or Cultivator, Drags and Drag Teeth; Horse and hand rakes, various kinds of garden rakes—steel and iron shovels and spades of different kinds—cast-steel and steel plated hoes, different kinds—ladies garden spades and hoes, toy spades and hoes—cast-steel and German steel manure forks and hooks—grain cradles; cradle, grass and bush scythes—bush and grass hooks; grain sickles; Hay knives; grafting, pruning and budding knives; clover and grass seed sieves, pea sieves—cheese presses, hoops and tubs—common and patent churns—cattle knobs and bull rings—curry combs and horse cards—ox yokes and bows—hedge shears, pruning saws—Canary birds and cages—hot bed plants in their season—Eglantine or Michigan running rose roots—and many other things which a limited space will not allow us to mention.

We have done business through one season, and are pleased to be able to say that we have been more liberally patronized than we anticipated when we began. We hope, and believe, that we have so dealt with those who have favored us with their custom, that *they* will not hesitate to give us their favors hereafter—and we hope *others* will try us. All favors will be duly and thankfully appreciated.

AGENTS.—The following persons are Agents for the sale of Garden, Field and Flower Seeds, put up at the above named Establishment:—

Attica, L. Doty,
Albion, Nickison & Paine,
Adams Basin, C. D. Graves,
Adrian, Mich., D. H. Underwood,
Auburn, Quick and Hall,
Aurora, H. & G. P. Morgan,
Batavia, J. P. Smith,
Buffalo, E. Rawson,
do. T. C. Peters,
do. H. O. Hayes,
Brockport, H. Lathrop,
Canandaigua, Chipman & Remington,
Cobourg, C. W., G. Boyer,
Dansville, M. Halstead & Co.
Detroit, Mich., F. F. Parker & Brother,
Geneseo, Bond & Walker,
Geneva, Lawrence & Barnes
Holley, H. N. Bushnell,
Havanna, G. T. Hinman,
Ithaca, Schyler & Co.,
Jackson, Mich., S. Chadwick
Le Roy, J. Annin,
Lewiston, H. F. Hotchkiss & Co.,
Lockport, Wm. Keep & Co.,
Lyndonville, E. Bowen,
Mt. Morris, L. J. Ames,
Medina, J. Nichols & Son,
Middleport, J. Craig,
Milwaukie, W. T., J. S. Moulthrop,
Niagara, C. W., Wm. Johnson & Son,
Penn Yan, E. H. Huntington
Pt. Byron, Kendrick & Yates
Scottsville, Caleb Allen, esq.
Seneca Falls, Joseph Osborn
Skaneateles, C. Pardee & Co
Syracuse, E. J. Foster,
Utica, J. E. Warner & Co.,
Union Springs, W. Cozzens,
Vienna, S. E. Norton,
Youngstown, A. Emerson.

☞ Garden Seeds put up at this Establishment can be found at most of the Stores in the State of New York west of Utica, and in some parts of Canada.

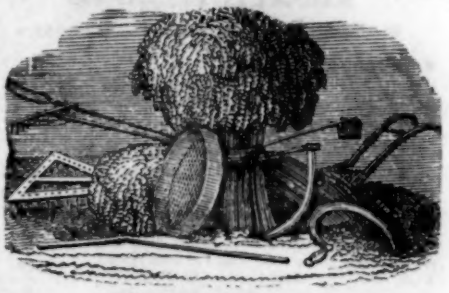
RAPALJE & BRIGGS.

Rochester, April, 1847. (4-tf)

Seedling Apple Trees wanted.—The subscriber wishes to purchase a few thousand seedling Apple Trees. Apply personally, or by mail, to S. MOULSON,
Rochester, Jan. 1, 1847.

Bound Volumes of the Farmer.

A few copies of Volume VI, bound, for sale at this office. Price 50 cents. Also, bound copies of Volume VII, 1846.



Rochester Seed Store.

[Established in 1831.]

No. 4 FRONT STREET, NEAR BUFFALO STREET.

By JAMES P. FOGG.

The subscriber begs leave to say to Farmers, and others, who have for the last three years so liberally patronized the *Old Rochester Seed Store*, that he has fitted up the Store, No. 4 Front street, on the west side of Front street, where he will be happy to see all who may want any article usually to be found in a Seed Store.

The subscriber is well aware of the important relation which the seedman holds to the whole farming community, and that on his honor and veracity the crop and profit of a season in some measure depend. The greatest care has been used in selecting the seeds offered at this establishment for the ensuing year, and they can be relied upon as pure and genuine, carefully selected and raised from the very best varieties, and properly cured. Many kinds were raised in the immediate vicinity of this city, by Mr. C. F. Crosman, and under the inspection of the proprietor; others were raised by experienced seed growers, and all can be recommended as genuine and true to their kinds.

Garden Seeds put up at this establishment in small papers, may be found with most of the merchants in the States of New York, Ohio and Michigan, and in Canada.

Rochester, N. Y. JAMES P. FOGG.

Choice Pear Trees.

ELLWANGER & BARRY offer for sale, in addition to the stock of their own growth, *one thousand beautiful Pear Trees for pyramids*—just received from Europe—in fine condition for planting. The assortment includes the most scarce and estimable varieties. Orders should be sent in at once.

E. & B.'s new catalogue of Green House plants is just published, and will be sent gratis to all post paid applications.

Spanish Merino Sheep.

FOR SALE.—A few choice MERINO SHEEP, bucks and ewes, of undoubted purity of blood, and a quality that will give satisfaction to purchasers. They can be sent west, by canal, at the subscriber's risk.

Cornwall, Vt., May 1, 1847. ROLLIN J. JONES.

Turnep Seed.

We have just received from England, by last Packet.

200	pounds	White Norfolk Turnep,	
200	"	Globe	do.
400	"	Ruta Baga	do.
50	"	Scotch Yellow	do.
100	"	assorted kinds	do.

Also 200 lbs. best English Field Carrot Seed—all of which we now offer for sale cheap, and warrant the seed genuine.

Farmers and dealers are respectfully requested to call at the *Genesee* (not Rochester) *Seed Store*, No. 18 Front st.

June 1, 1847. RAPALJE & BRIGGS.

Peas, Peas!—200 bushels Gold Vine Peas, just received from Canada, and free from bugs—for sale by R. & B. at the Genesee Seed Store. Those wishing a good article will please give us a call. It is not yet too late to sow them. June 1, 1847.

Clover and Timothy Seed.—500 bushels of Clover and Timothy Seed, for sale at the Genesee Seed Store, No. 18, (old No. 10,) Front street, by

Rochester, April 1, 1847. RAPALJE & BRIGGS.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,	1,38	1,50	Pork, bbl, mess	15,00	
Corn,	63	—	Pork, cwt,	5,00	
Barley,	50		Beef, cwt,	5,00	
Oats,	50		Lard, lb,	8	9
Flour,	6,50	6,75	Butter, lb,	10	11
Beans,	75	87	Cheese, old, lb.,	7	7¼
Apples, bushel	50	75	Eggs, doz,	9	10
Potatoes,	50		Poultry,	7	
Clover Seed,	4,00	4,50	Tallow,	9	
Timothy,	1,50		Maple Sugar,	8	
Hay, ton,	8,00		Lamb Skins,	10	25
Wood, cord,	2,50	3,50	Green Hides, lb	3¼	
Salt, bbl,	1,06		Dry "	7	8
Hams, lb,	7	8	Calf Skins,	8	

Wool Market.

A large business has been done in wool during the past week—probably 50,000 lbs. have been sold in this market. The general range of prices is from 25 to 35 cents. A very few large lots of fine wool, in excellent condition, have brought 37 cts., and some lots 37½ cents. Dealers inform us that wool is brought to market in better condition this year than formerly—greater pains being taken to cleanse it. Farmers will find it greatly for their interest to see that their wool is brought to market in good condition.

It is difficult to give the prices according to blood, as buyers look to condition, cleanness, &c., in making purchases. We however subjoin the general range:

Full blood Saxony fleeces,	31 *a* 35
do. Merino do.	28 *a* 31
Half-blood do. do.	25 *a* 28
Quarter-blood do. common,	20 *a* 25
Coarse English and bad conditioned wool,	13 *a* 20

Rochester, June 28, 1847.

NEW YORK, June 26—7 P. M.

FLOUR to-day was in good demand, and considerable sales were made at $7 for Mich., and $7,12½ for Genesee. Some irregular lots Ohio and Michigan were procured at $6,75 *a* $6,87½. On 'change the market was stiffer, and Genesee in demand at $7,12½ and steady; Michigan $7. Some 3000 bbls. of the latter sold at $7,12½, and there was one buyer for Genesee at $7,18.

WHEAT is very heavy, and 5 to 10 cts. cheaper than yesterday. The sales are some 5000 bu. at $1,57 *a* $1,60 for Ohio.

NEW YORK WOOL MARKET—*June* 26.—The stock of Fleece is extremely light, and our quotations are nearly nominal. In Foreign, sales have been made of 200 bales Odessa, on private terms, and 35 bales Mexican at about 10 cents, 6 months.

Saxony fleeces,	40 *a* 45	Com. ¼ blood Merino	25 *a* 27
Full blood Merino	35 *a* 38	Superfine pulled,	30 *a* 31
3-4 blood do	28	No. 1 do.	26 *a* 27
1-2 blood do	32		

Exhibition of the N. Y. State Ag. Society at Saratoga.

THOSE who intend to compete for premiums should remember that all animals and articles must be ready for examination on the *first day* of the Exhibition—that is, on *Tuesday, the fourteenth of September.* The first day will be devoted exclusively to the examination by the judges of the animals and articles exhibited, and no persons will be admitted within the enclosure on that day, except the officers of the society, judges and exhibitors.

Kephart's Fruit and Vegetable Preserver,

By which Fruits, Vegetables, Butter, Eggs, Bacon, &c., can be preserved throughout the year—a full description of which will be found in the 6th No. (vol. 3) Genesee Farmer.

The undersigned having purchased the above Patent Right for the United States, excepting the States of N. J., Del., Md., and the cities of New York and St. Louis, offer for sale Patent Rights for the construction and use of the Preserver, by States, Cities, Counties, Towns, or individual rights, upon satisfactory terms.

All communications will receive prompt attention if addressed either to PETER KEPHART, Western Hotel, Baltimore, Md., or FLACK, THOMPSON & Co.
Spring Garden P. O., Phila., Pa.

PUBLISHERS' NOTICES.

To Advertisers.

THE GENESEE FARMER is by far the best medium for advertising in this section of the country. In addition to a very large circulation in Western New York, it has thousands of readers in the Western and South-western States, New England and the Canadas. It has subscribers in *every State and Territory* (except Oregon) *in the Union.* The Farmer is received by several thousand country merchants, post-masters, &c., and is therefore a very desirable medium for the advertisements and business cards of wholesale dealers of all kinds.

The enlargement of the Farmer next month, will enable us to give a variety of short advertisements. Manufacturers and dealers in Agricultural Implements, owners of valuable Patent Rights, breeders of choice Cattle and Sheep, Nurserymen, &c., &c., will find that the Farmer is a better and cheaper medium (taking terms and circulation into the account,) than any other agricultural journal.

We make this announcement, because we have heretofore been compelled to decline the publication of many advertisements for the want of space.

TERMS:—Short advertisements will be inserted at the rate of $1 per square for the first insertion, and 75 cents for each subsequent insertion, (25 per cent. less than our present terms.) Contracts at a less rate will be made with those who wish a column or page, by the year.

☞ Advertisements for our August number should be in hand previous to the 20th of July. All communications addressed to the Publisher, *post paid*, will receive prompt attention. July 1, 1847.

To Clubs.—Any Post Master or other person who has sent us eight or more subscribers, will be furnished with any additional number of copies at the club price—37½ cents each. We hope those who have formed clubs, will bear this in mind, and forward the subscriptions of such as may hereafter want the Farmer. Back numbers can be supplied—so that all may have the entire volume.

☞ List of acknowledgments necessarily deferred.

A Word to Farmers.

SAGE & BROTHER have received a very fine assortment of Agricultural Works, peculiarly adapted to the intelligent cultivators of the earth, who combine science with labor, and thereby render their farms doubly productive.

The works are from the pens of Downing, Fessenden, Kendrick, Thomas, Buel, Youatt, Clater, and a host of others, who have lived and written for the good of the agriculturist, and proved themselves benefactors to their race.

Call and see at No. 40 Buffalo, corner State Street.
Rochester, June 1, 1847.—3t.

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